

## DOCUMENT RESUME

ED 413 938

JC 970 597

AUTHOR Windham, Patricia W.; Hackett, E. Raymond  
TITLE The Florida Community College Accountability Plan: An Analysis of Institutional Characteristics and Success at Meeting State Defined Performance Measures.  
INSTITUTION Florida State Board of Community Colleges, Tallahassee.  
PUB DATE 1997-10-00  
NOTE 54p.; Paper presented at the Annual Meeting of the Southern Association for Institutional Research (26th, Hot Springs, AR, October 11-14, 1997).  
PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)  
EDRS PRICE MF01/PC03 Plus Postage.  
DESCRIPTORS \*College Outcomes Assessment; Community Colleges; \*Institutional Characteristics; Institutional Research; Research Methodology; Research Utilization; \*School Effectiveness; State Surveys; \*Statewide Planning; Two Year Colleges; \*Validity  
IDENTIFIERS \*Florida Community College System

## ABSTRACT

In response to the increasing use of state-based performance indicators for postsecondary education, a study was undertaken to review the reliability and validity of state-level indicators in the Florida Community College System (FCCS). Data were collected from literature reviews and the 1996 FCCS Accountability Report, detailing outcomes for 17 accountability measures for the 1993-94, 1994-95, and 1995-96 academic years. Information was also gathered on institution size, program mix, and expenditures for the 28 colleges in the System. In the first phase of the study, the progress made by the colleges on the 17 accountability measures was determined, indicating that progress was shown on only 8 of the measures, including 6 related to retention and success and 2 related to academic performance. In the second phase, the relationship between the measures and institutional characteristics was explored. This analysis revealed that, for associate in arts (AA) programs, higher faculty salaries, a higher percentage of total expenditures spent on instruction, and a higher full-time equivalency (FTE) count were related to higher retention and success. For associate in science (AS) programs, only higher overall FTE and a higher percent of postsecondary vocational FTE students were related to higher retention and success. Thirty-eight sets of tables showing FCCS outcomes for AA and AS programs and a list of variables used in the study are attached. (BCY)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

**The Florida Community College Accountability Plan:  
An Analysis of Institutional Characteristics and Success  
at Meeting State Defined Performance Measures**

**Patricia W. Windham**  
Director, Educational Effectiveness and Research  
Florida State Board of Community Colleges

**E. Raymond Hackett**  
Assistant Professor and Executive Director  
College Information Systems Association  
Auburn University

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it.

☐ Minor changes have been made to  
improve reproduction quality.

• Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

P. W. Windham

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

Presented at Southern Association for Institutional Research Annual Meeting

(26th, 11-14 October 1997)

**BEST COPY AVAILABLE**

## **ABSTRACT**

### **The Florida Community College Accountability Plan: An Analysis of Institutional Characteristics and Success at Meeting State Defined Performance Measures**

State-based performance indicators for postsecondary education are rapidly becoming the hallmark of the 1990's. A number of states now have some form of performance indicator legislation enacted and with each legislative session the number increases. This paper studies the reliability and validity of accountability measures and performance indicators established at the state-level for a system of community colleges and reviews the appropriateness of the measures for systemic decision making and public reporting. This paper serves as a challenge to the institutional research community to take an active role in the study of measures defined as instruments of public higher education policy.

# **The Florida Community College Accountability Plan: An Analysis of Institutional Characteristics and Success at Meeting State Defined Performance Measures**

## **1. Introduction and Perspective**

State-based performance indicators for postsecondary education are rapidly becoming the hallmark of the 1990's. By 1993 over one-third of the states had some form of performance indicator legislation enacted (Bogue, Creech & Folger, 1993) and with each legislative session since the number has increased. Discussion at the state level has begun to shift toward funding the enterprise based on outcomes, effectiveness, and efficiency (Gather, Nedwek, and Neal, 1994). Significant attempts at operationalizing these grand concepts and weaving them into the fabric of planning, policy and budget development were given license in several states during the 1996 legislative session. In the 1994 Education Commission of the States publication Charting Higher Education Accountability (Ruppert, 1994) a case study of ten states indicated that the adoption of state-level performance indicators was most often done rapidly, relied on existing data and was usually driven by legislative initiative. This report implied that few states have accomplished the analysis necessary to define measures appropriate for systemic decision making and public reporting.

The Florida Community College System has had an effective system-level data collection effort in place for over two decades. Florida is one of the States that has moved aggressively to adopt state-level performance indicators. The 1994 Accountability Plan for Florida Community Colleges clearly established the relationship of the accountability measures, which met legislative requirements, with the mission and five-year master plan for the Community College System. The Accountability Plan established an oversight process and set goals for each of the accountability measures system-wide and for each campus. Seventeen measures encompassing five majors by seventeen indicators have been collected for three years and individual goals for each institution on each indicator established. This study was conducted to explore whether these measures are appropriate for systemic decision making and public reporting.

## **2. Purpose**

The purpose of this paper was to study the reliability and validity of accountability measures established at the state-level for a system of community colleges and review the appropriateness of the measures for systemic decision making and public reporting.

## **3. Literature Review and Background**

There has been significant discussion on the development of performance indicators and their use in higher education. Among these extant models are: the National Association of College and University's Financial Self-Assessment Workbook (1987); Performance Measurement Systems for Higher Education (Kidwell and Long, 1995); Strategic Indicators for Higher Education (Taylor, Myerson and Massy, 1993); and Measuring Up: The Promises and Pitfalls of Performance Indicators (Gather, Nedwek and Neal, 1994). Currently in progress is the NACUBO Benchmarking Project, which is focused on developing quantitative measures to set as a point of reference and standard for basic operations. However, most of the analysis and literature on the development of state-level performance indicators describes a pattern of implementation with little prior conceptual development and a focus on inter-institutional comparison (Bogue, Creech & Folger, 1993). A 1994 Education Commission of the States study found that performance indicator initiatives in the various states contain many of the same measures (Ruppert, 1994). Most of the states studied used 20 or so indicators that were collected by a governing board and reported in a tabular form. The indicators most commonly used reflected some measure of: instructional inputs; instructional process and use of resources; instructional outcomes; efficiency and productivity; diversity and access; articulation; and relation to state needs.

In the 1987 revision of, Financial Self- Assessment: A Workbook for Colleges and Universities. (Dickmever & Hughes) the concept of an overall institutional equation, defined in terms of performance indicators, was emphasized. It was strongly implied in this volume that there were ranges within the various indicators presented that indicated good, moderate or poor performance on a given indicator. It was also implied, in this major work of a standing NACUBO committee, that a certain equation could be inferred for an institution from a

combination of these indicators. It was further implied that this unique equation could provide an indication of institutional health, and areas of institutional strength and weakness. The most noticeable addition to this line of thinking was put forth by Mary Sapp (1994) in the AIR Professional File document, Setting a Key Success Index Report: A How to Manual. Institutions are complex, and within this paradigm there are a number of possible equations. Further research must be done in defining the use and efficacy of performance indicators, particularly, if they are to be used as major vehicles in defining and enforcing state policy.

Under Section 240.324 Florida Statutes (1991, the State Board of Community Colleges and the community colleges boards of trustees were to "develop and implement a plan to improve and evaluate the instructional and administrative efficiency and effectiveness of the State Community College System." The law specifically mandated that the accountability planning process address the following issues:

- a) graduation rates of Associate of Arts (AA) and Associate of Science (AS) degree-seeking students compared to first-time enrolled students seeking the associate degree;
- b) minority student enrollment and retention rates;
- c) student performance, including student performance rates on college-level academic skills tests, mean grade point averages for community college AA transfer students, and community college student performance on state licensure examinations;
- d) job placement rates of community college vocational students; and,
- e) student progress by admission status and program.

In response to this legislative initiative, the Florida State Board of Community Colleges adopted an Accountability Plan in 1994, which established the relationship of accountability measures, which met the legislative requirements, with the mission and five-year Master Plan for the community college system. The Committee on Accountability and Effectiveness, a standing committee under the State Board of Community Colleges Program and Planning Committee defined these accountability measures. The 1994 Accountability Plan also provided a framework within which the accountability planning process would take place, established

and oversight process, and set System goals for each of the accountability measures. In accordance with the legislation, each community college developed an Institutional Accountability Plan and established Institutional Five-Year Goals for each of the seventeen defined measures. Table I shows details for each of the seventeen accountability measures that operationally define the Accountability Plan.

Table 1

Definition of the Florida community college accountability measures

- Associate in Arts Retention Measure - The percent of associate in arts degree students who have earned 18 credit hours, that were retained or graduated four years after the date of initial enrollment. (label = Retention Rate A.A.)
- Associate in Arts Success Measure - The percent of associate in arts degree students who have earned at least 18 credit hours, have graduated, were retained in good standing, or left in good standing four years after the date of initial enrollment. . (label = Success Rate A.A.)
- Associate in Science Retention Measure - The percent of associate in science degree students who have earned 18 credit hours that were retained or graduated four years after the date of initial enrollment. (label = Retention Rate A.S.)
- Associate in Science Success Measure - the percent of associate in science degree students who have earned at least 18 credit hours, have graduated, were retained in good standing, or left in good standing four years after the date of initial enrollment. . (label = Success Rate A.S.)
- Postsecondary Vocational Certificate Retention Measure - The percent of postsecondary vocational certificate program students who have earned 18 credit hours, that were retained or graduated four years after the date of initial enrollment. (label = Retention Rate P.S.V.C.)
- Postsecondary Vocational Certificate Success Measure - The percent postsecondary vocational certificate program students who have earned at least 18 credit hours, have graduated, were retained in good standing, or left in good standing four years after the date of initial enrollment. . (label = Success Rate P.S.V.C.)

- Associate in Arts Transfer Student Performance - The percent of students, having completed their entire associate in arts degree program at a community college in which they initially enrolled, who after one full year at a university have a GPA at or above 2.5 on a 4.0 scale. (label - GPA Performance A.A. 2.5 & Above)
- Licensure Pass Rate Measure - The percentage of associate in science degree program students who, after completing their degree program, passed the licensure exam for their respective vocational program. (label = State Licensure Pass Rate)
- Placement Rate Measure - The percentage of associate in science degree program students who, after completing their degree program, were found in the Florida Education and Training Placement Information Program pool of employed and were placed in an occupation related to their instruction. (label = Vocational Program Placement)
- College Preparatory Reading Performance Measure - The percentage of first time in college (FTIC) students who tested into and enrolled in reading preparatory courses who have successfully completed the program within two years. (label = College Prep Success Rate - Reading)
- College Preparatory Writing Performance Measure - The percentage of first time in college (FTIC) students who tested into and enrolled in writing preparatory courses whom have successfully completed the program within two years. (label = College Prep Success Rate - Writing)
- College Preparatory Math Performance Measure - The percentage of first time in college (FTIC) students who tested into and enrolled in math preparatory courses who have successfully completed the program within two years. (label = College Prep Success Rate - Math)
- College Preparatory Retention Measure - The percent of students who successfully completed a college preparatory program and have subsequently graduated, or who are still enrolled in an associate in arts degree program, four years after the date of initial enrollment in the A.A. degree program. (label = College Prep Retention Rate A.A.)
- College Preparatory Success Measure - The percent of students who successfully completed a college preparatory program and have subsequently graduated, or who are retained in



good standing, or who have left in good standing, four years after the date of initial enrollment in the A.A. degree program. (label = College Prep Success Rate A.A.)

- Associate in Arts CLAST Measure, College Preparatory Students - The percentage of students who successfully completed a college preparatory program, and have completed 60 or more college credits at a specific institution, who have met the College Level Academic Skills Test (CLAST) passing standards. (label = CLAST Performance College Prep)
- Associate in Arts CLAST Measure, Non-College Preparatory Students - The percentage of students who, were admitted as regular students, who have completed 60 or more college credits at a specific institution who have met the College Level Academic Skills Test (CLAST) passing standards. (label = CLAST Performance Non-College Prep)
- Associate in Arts CLAST Measure, All Students - The percentage of students who have completed 60 or more college credits at a specific institution who have met the College Level Academic Skills Test (CLAST) passing standards. (label = CLAST Total Performance)

With the approval of the 1996 Accountability Report of the Florida Community College System by the State Board of Community Colleges three years of data on the accountability measures at institutional level were available for analysis. Most of the measures reflect outcomes related to activity at the institutions for four years prior. An analysis examining the characteristics of institutions successful in meeting their goals, and of the usefulness of the goals themselves, would most appropriately be accomplished after year five.

#### **4. Data Sources**

The 1996 Accountability Report of the Florida Community College System provides data on 17 accountability measures for the 28 institutions in the Florida system. Data from each of the institutions for each of the measures for the three school years 1993-94, 1994-95, and 1995-96 was collected from this report. Information on institutional characteristics was collected from the system-level database maintained by the Florida Division of Community Colleges. These actual score measures served as dependent variables in the study together with a ratio level number representing progress toward goal. This second measure was created by dividing the score measure for each college for the three school years by the five year goal established for that measure and college.

Data to be used as independent variables in the study were collected from reports produced by the Division of Community Colleges Bureau of Research and Information Systems. Given that most of the accountability measures reflect activity that had occurred four years prior, data was collected for these years as appropriate. Institutional and program attributes were defined from available data that reflected measures of institutional size, program mix and expenditures. Those measures are detailed in Table 2.

Table 2

Measure of institutional attributes

Measures of Institutional or Program Size

- Total institutional FTE enrollment
- Total advanced and professional FTE enrollment
- Total postsecondary vocational FTE enrollment
- Total adult postsecondary vocational FTE enrollment
- Total college preparatory FTE enrollment

Measures of Program Mix

- Total advanced and professional FTE enrollment as a percent of Total FTE enrollment
- Total postsecondary vocational FTE enrollment as a percent of Total FTE enrollment
- Total adult postsecondary vocational FTE enrollment as a percent of Total FTE enrollment
- Total college preparatory FTE enrollment as a percent of Total FTE enrollment

Measures of Institutional or Program Expenditures

- Total instructional expenditures as a percent total expenditures by institution
- Total non-instructional expenditures as a percent total expenditures by institution
- Advanced and professional institutional full cost per FTE
- Postsecondary vocational institutional full cost per FTE
- Adult postsecondary vocational institutional full cost per FTE
- Total college preparatory institutional full cost per FTE
- Average salary of full time instructional personnel calculated as a 2.0 semester equivalent by institution

**BEST COPY AVAILABLE**

## 5. Methodology

Given that just the initial three years of data has been reported on the accountability measures it was decided to approach this problem with descriptive statistics and analysis of variance. This seemed most appropriate and the most likely approach to yield insights necessary for developing a full research program to test the validity and reliability of the Florida Community Colleges Accountability Plan. The study was conducted in two phases.

### Phase One

For each of the 17 performance indicators analysis was conducted to determine whether institutions were, in fact, indicating progress toward their state-established goals. For each measure descriptive statistics were calculated for each of the three school years 1993-94, 1994-95, and 1995-96 and charted as a box plot with median, middle 50% and upper and lower limits. A second analysis was conducted using each score measure for each college for the three school years divided by the five year goal established for that measure. For this fraction, serving as a measure of progress toward goal, descriptive statistics were calculated for each of the three school years 1993-94, 1994-95, and 1995-96 and charted as a box plot with median, middle 50% and upper and lower limits.

### Phase Two

Given the wide dispersion seen on the 17 score measures in phase one it was decided to explore the relationship between each of the measures and institutional characteristics such as institutional and program size, programmatic mix, institutional and program expenditures. Each of the 17 score measures was averaged across all three years by institution and the institutions ranked in ascending order. For each measure the institutions were then placed into one of three groups: a low group on a measure, containing 9 institutions; an average group on a measure, containing 10 institutions; and a high group on a measure, containing 9 institutions. A mean was then calculated for each group. Correlation coefficients were calculated for all the measures found in tables 1 and 2. Given these results select accountability measures were chosen for further examination within the context of select institutional characteristics. Using each selected institutional characteristic as a dependent variable, a repeated measures ANOVA was calculated with the selected accountability measures serving as the independent variables across the low, average and high groupings over a six year period.

## 6. Results or Conclusions

The most notable result in phase one was the fairly wide dispersion between the institutions on the actual accountability measures and on progress toward goal. As can be seen in figures 1 through 17, eight of the accountability measures exhibited some progress toward goal, in the terms of system-wide mean and a decreasing dispersion, while nine did not. The measures showing some progress included the: associate in arts retention measure (Figure 1) ; associate in arts success measure (Figure 2); associate in science success measure (Figure 4); postsecondary vocational certificate retention measure (Figure 5); postsecondary vocational certificate success measure (Figure 6); associate in arts transfer student performance measure (Figure 7); college preparatory reading performance measure (Figure 10); and the college preparatory retention measure (Figure 13). Interestingly six of these are related to retention and success and the remaining two to academic performance.

Phase two produced a number of interesting interactions that warrant further study in the future when more data is available. Examining measures related to the associate in arts programs higher faculty salaries, a higher percent of total expenditures spent on instruction, and a higher overall FTE count seemed to be related to higher retention and success. Interestingly, cost per FTE for the A&P program showed little differentiated effect. What was not readily explained was that institutions with a lower percentage of students in A & P programs had a lower retention rate and institutions with a higher percentage of students in A & P programs had lower success rate.

Examining measures related to the associate in science programs, a higher overall FTE count and a higher percent of postsecondary vocational FTE students seemed to be related to higher retention and success. Interestingly, there were no other institutional characteristics that were visibly related to the accountability measures for the associate in science programs.

Examining several academic performance accountability measures indicated that students from institutions with smaller student populations were more successful in the classroom at senior institutions than students from larger institutions. Institutions with a higher percentage of students in A & P programs and institutions with a higher percent of total expenditures spent on instruction evidenced higher total performance on the CLAST measure.

BEST COPY AVAILABLE

Overall, some of the effects seen in the analyses conducted for phase two make intuitive sense while others do not. What is clear is that the constructs defined in this state's accountability program for community colleges contain a rich potential mix of effects and interaction effects. Establishing construct validity for these potential instruments of public higher education policy will require the following: a sophisticated and appropriate research design; more discrete data on individual academic programs at the institution level; more discrete data on students in individual programs at the institution level; and an appropriate historical framework for the data.

## **7. Implications for Institutional Researchers**

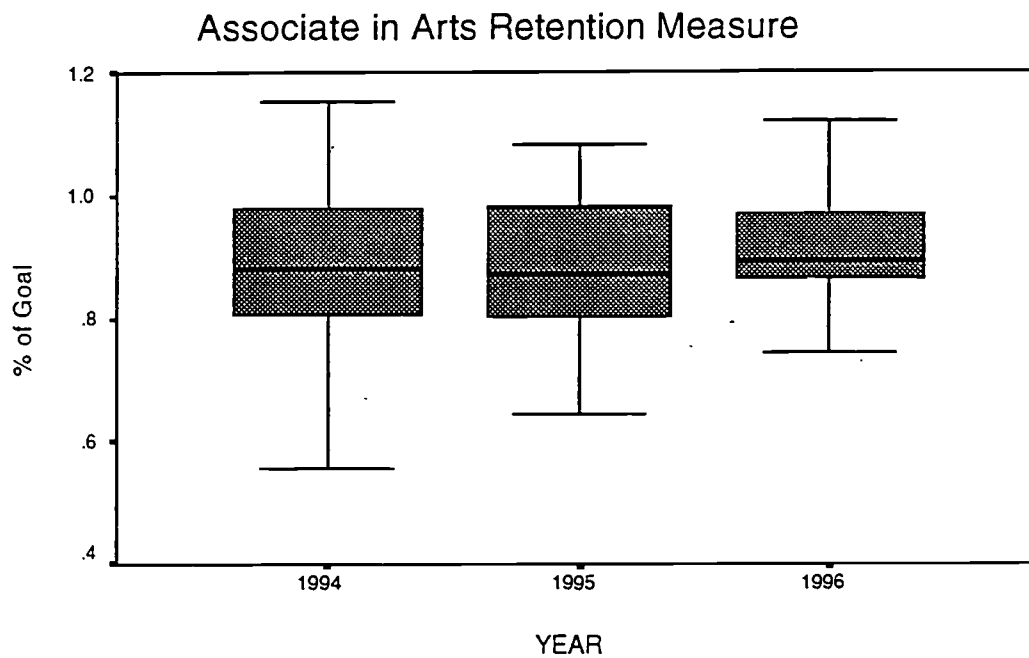
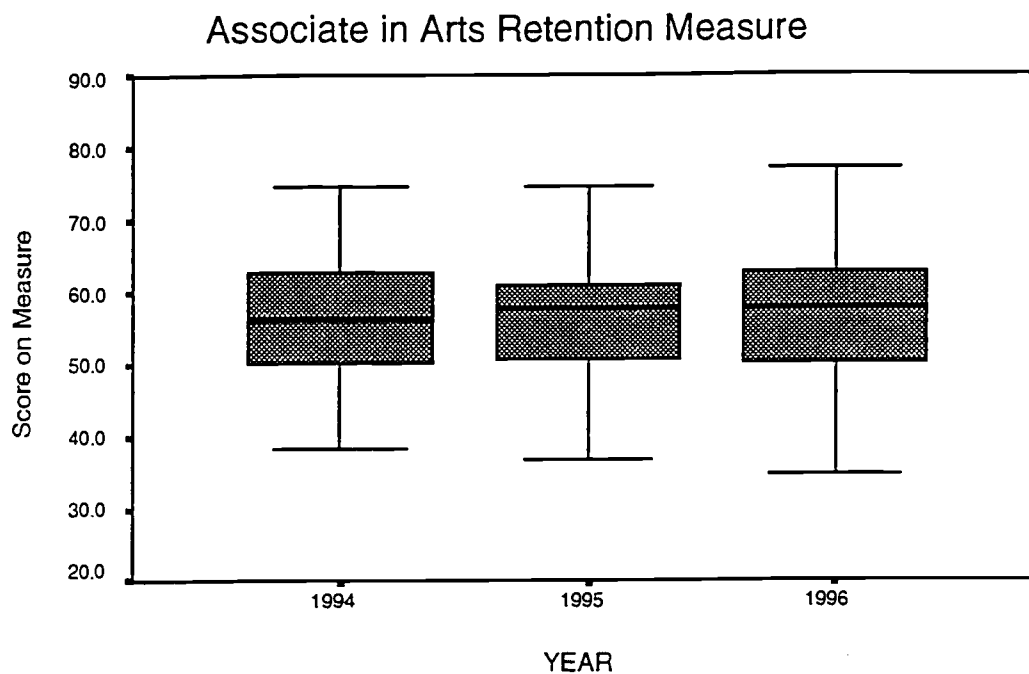
The first implication for institutional researchers is that state-established accountability measures and performance indicators should undergo rigorous analysis in terms of their validity and reliability related to the constructs that they are purported to measure. The results of this preliminary study indicate that the institutional research community must take an active role in the study of measures defined as instruments of public higher education policy.

## **Bibliography**

- Bogue, G. Creech, J. and Folger, J. (1993). Assessing Quality in Higher Education: Policy Actions in SREB States. Southern Regional Education Board: Atlanta, Georgia
- Dickmeyer, N. and Huges, K.S. (1987). Financial Self- Assessment: A Workbook for Colleges and Universities. National Association of College and University Business Officers.
- Kidwell, J.J. and Long, L. (1995). Performance Measurement Systems for Higher Education. NACUBO's Effective Management Series
- Ruppert, S. (ed) (1994). Charting Higher Education Accountability. Education Commission of the States: Denver, CO.
- Sapp, M.M. (1994). "Setting up a Key Success Index Report: A How-to Manual." *AIR Professional File Number 51*, Winter, 1994.
- Taylor, B.E., Myerson, J.W. and Massy, W.F. (1993). Strategic Indicators in Higher Education: Improving Performance. Peterson's Guides, Princeton, NJ.

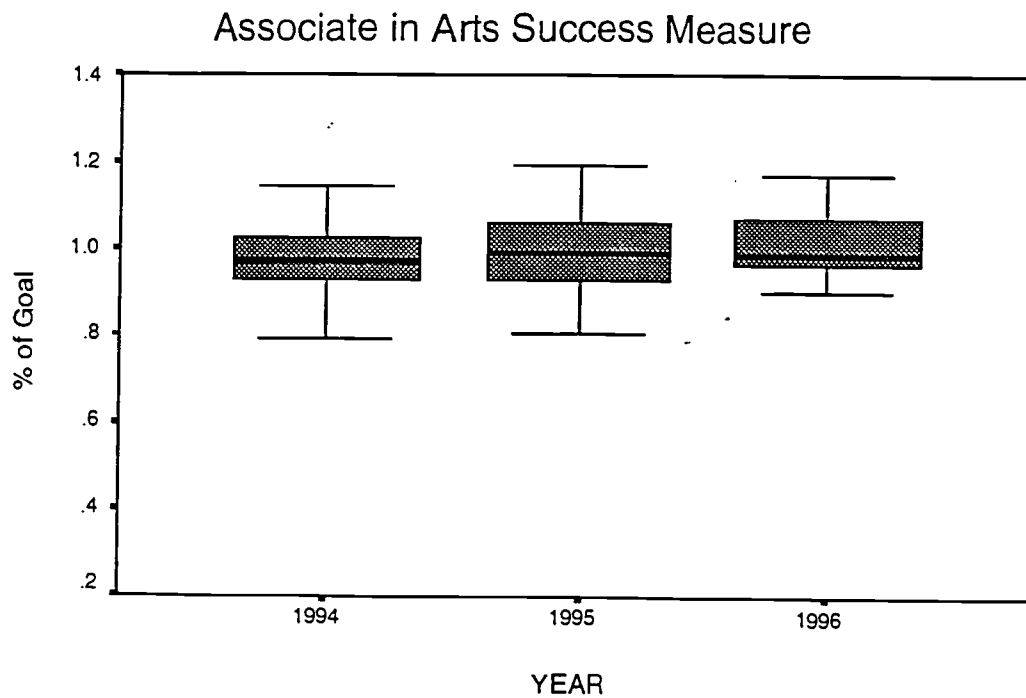
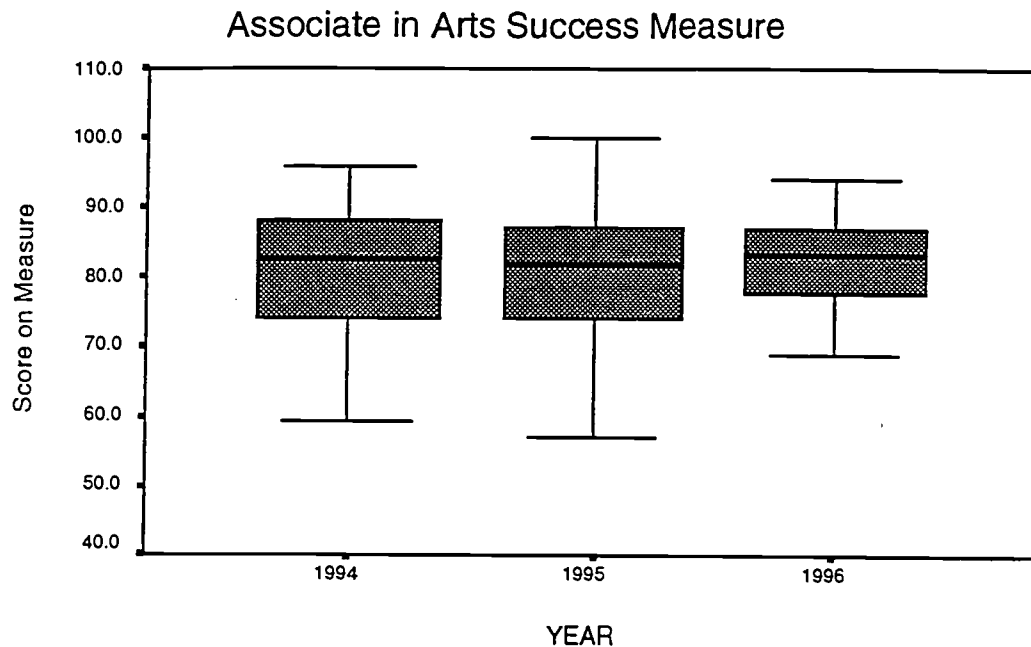
**Figure 1**

**Associate in Arts Retention Measure: Score Measure**



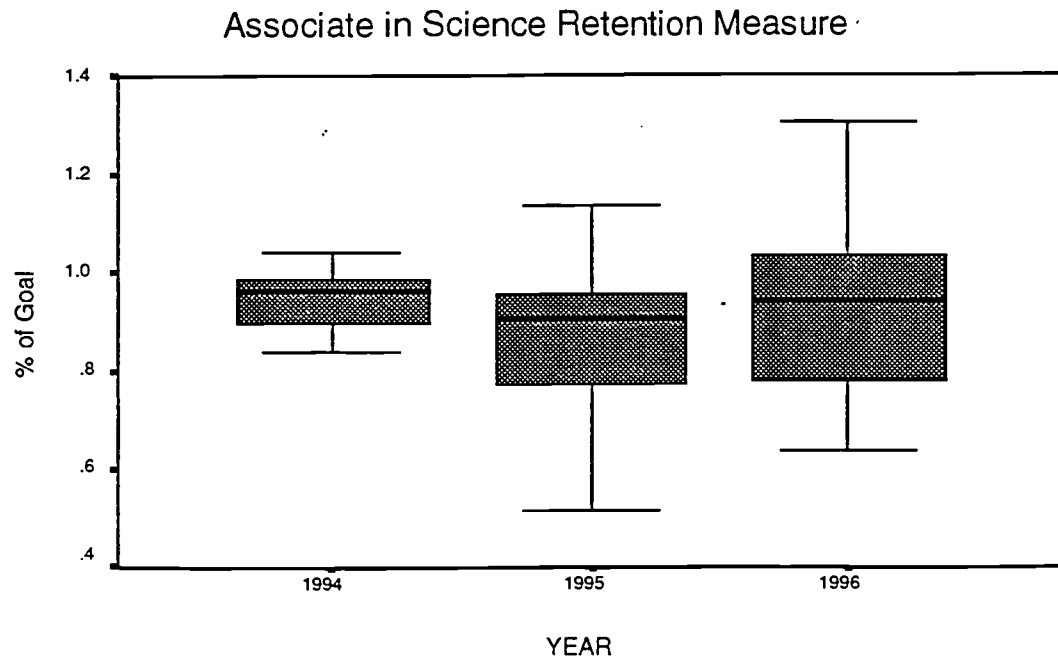
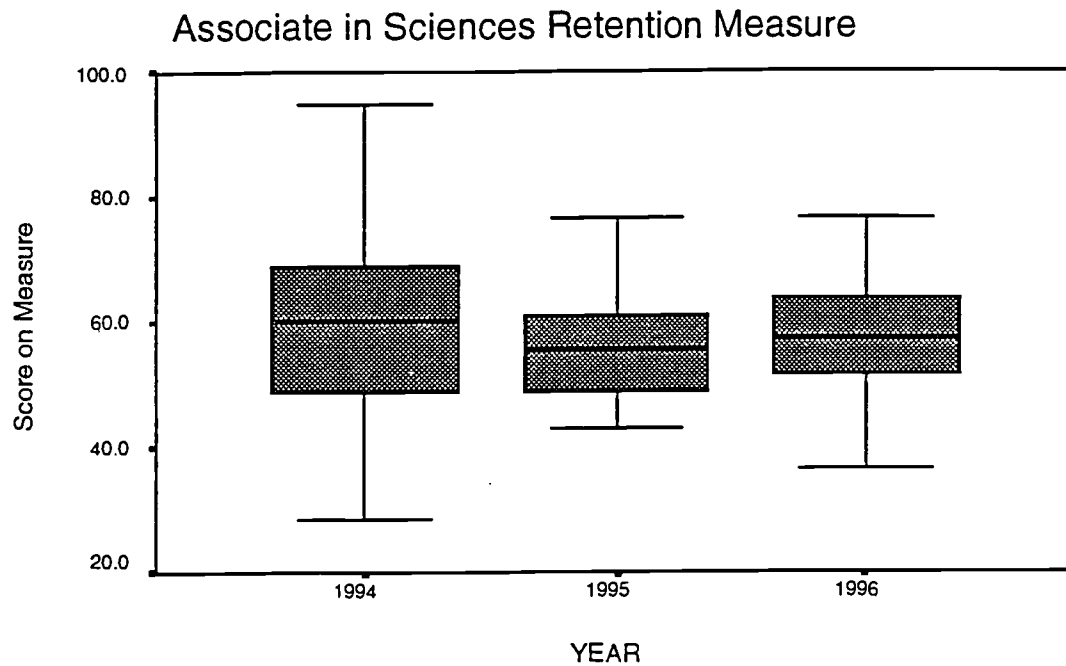
**Figure 2**

**Associate in Arts Success Measure: Score Measure  
and as a Percent of Goal**



**Figure 3**

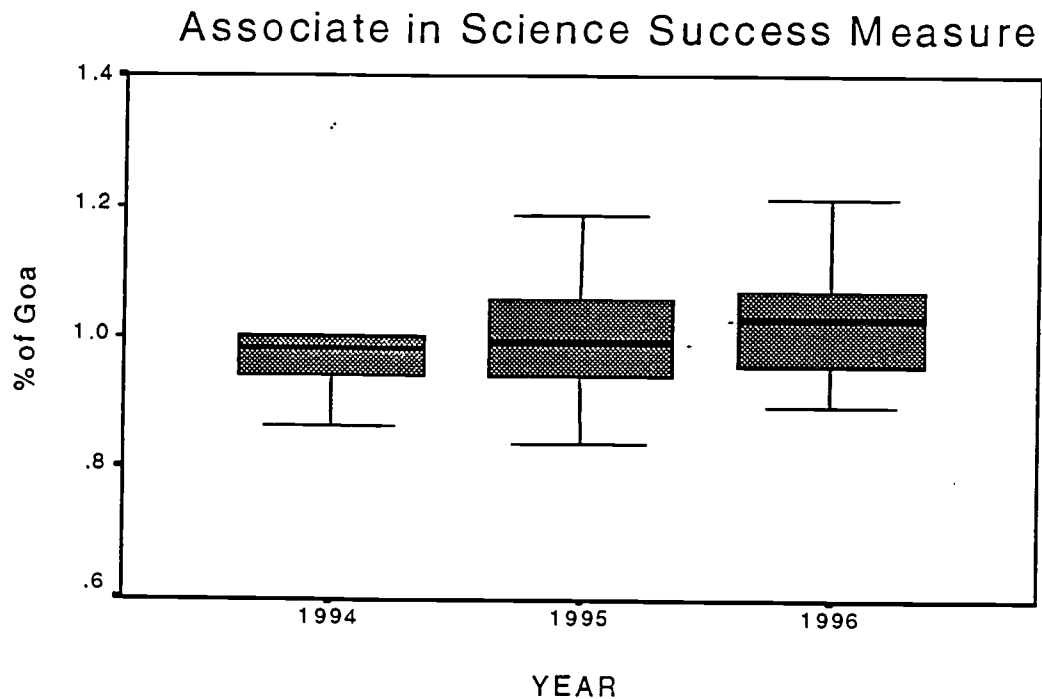
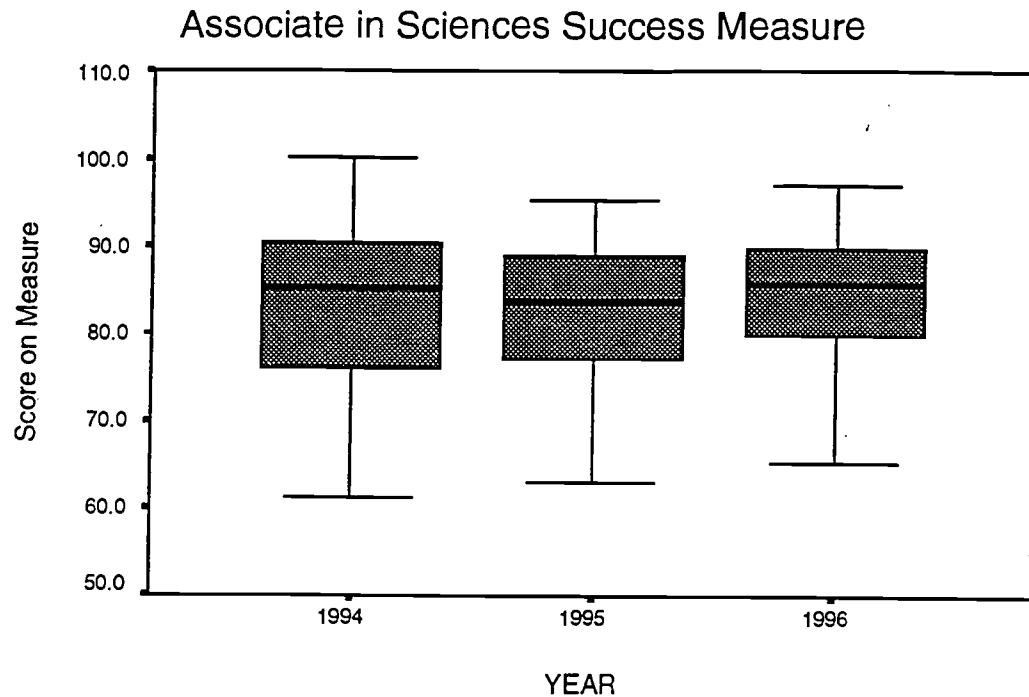
**Associate in Science Retention Measure: Score Measure  
and as a Percent of Goal**





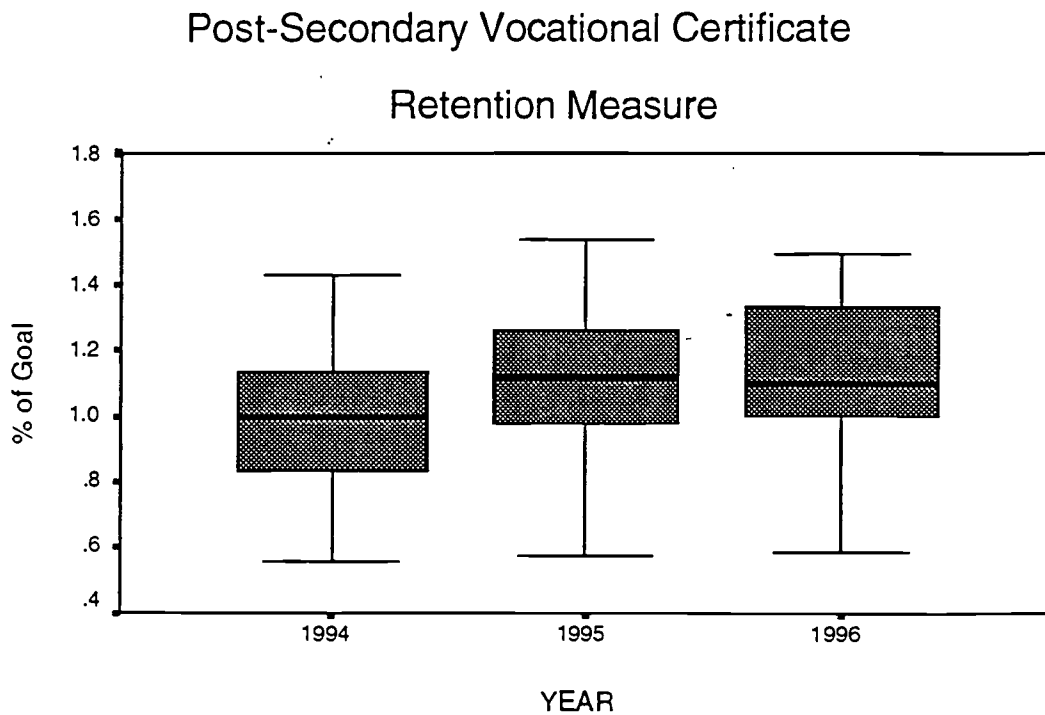
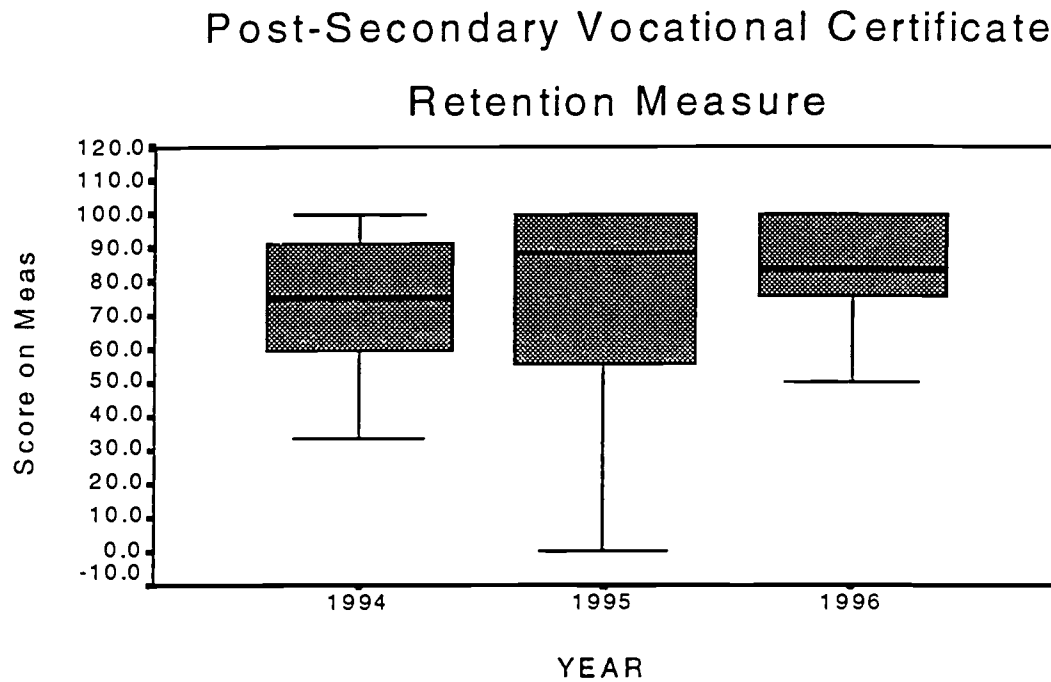
**Figure 4**

**Associate in Science Success Measure: Score Measure  
and as a Percent of Goal**



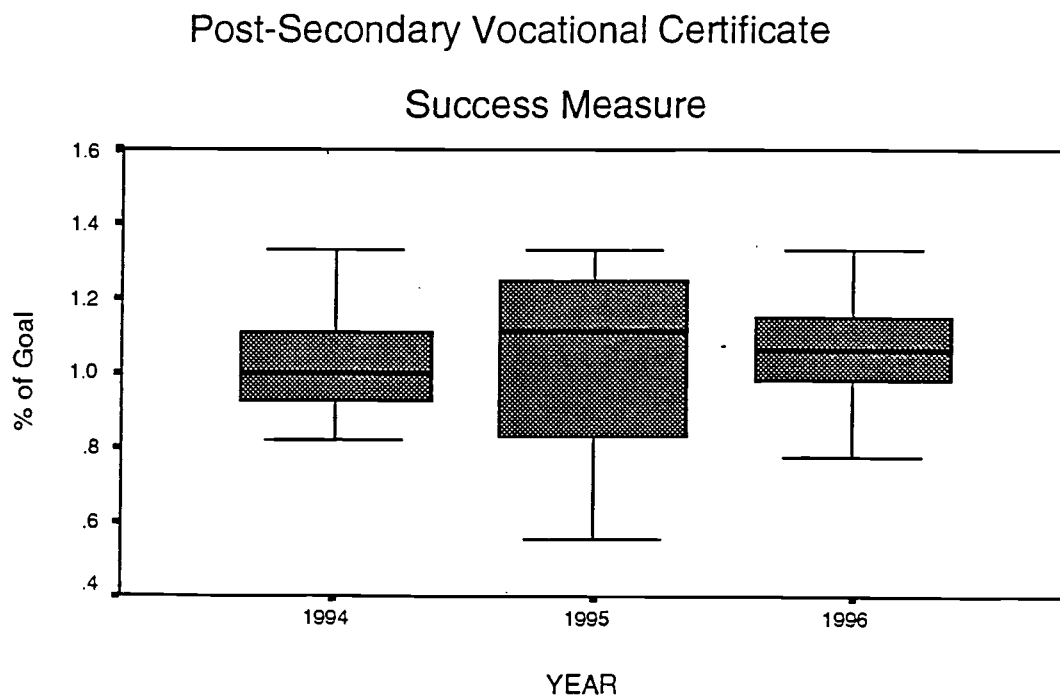
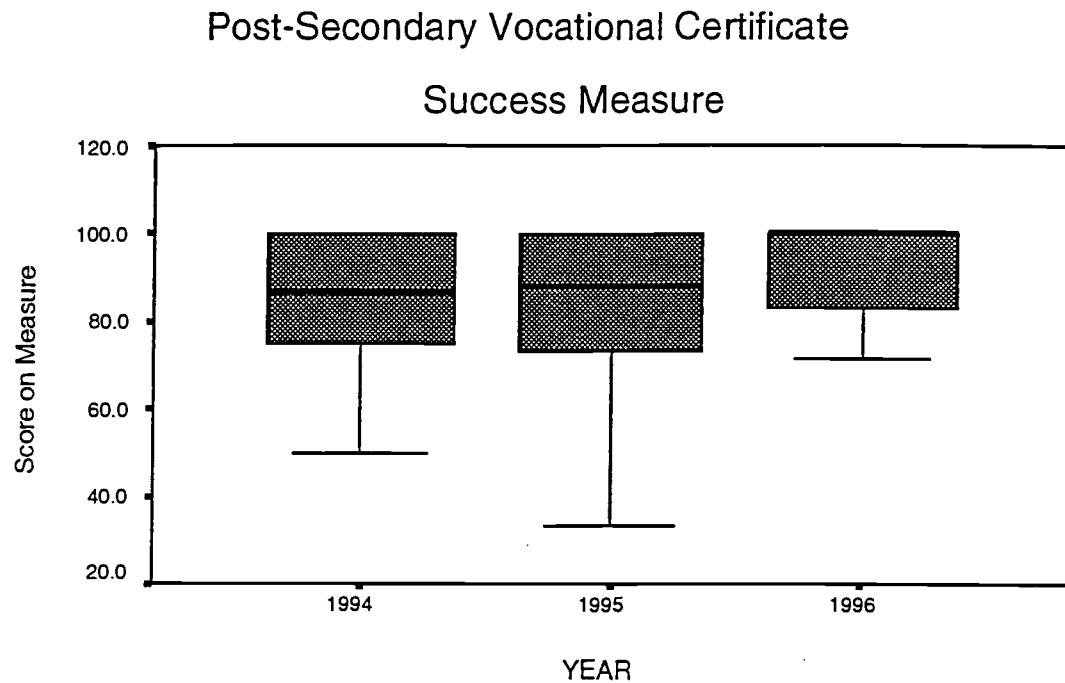
**Figure 5**

**Post-Secondary Vocational Certificate Retention Measure:  
Score Measure and as a Percent of Goal**



**Figure 6**

**Post-Secondary Vocational Certification Success Measure:  
Score Measure and as a Percent of Goal**

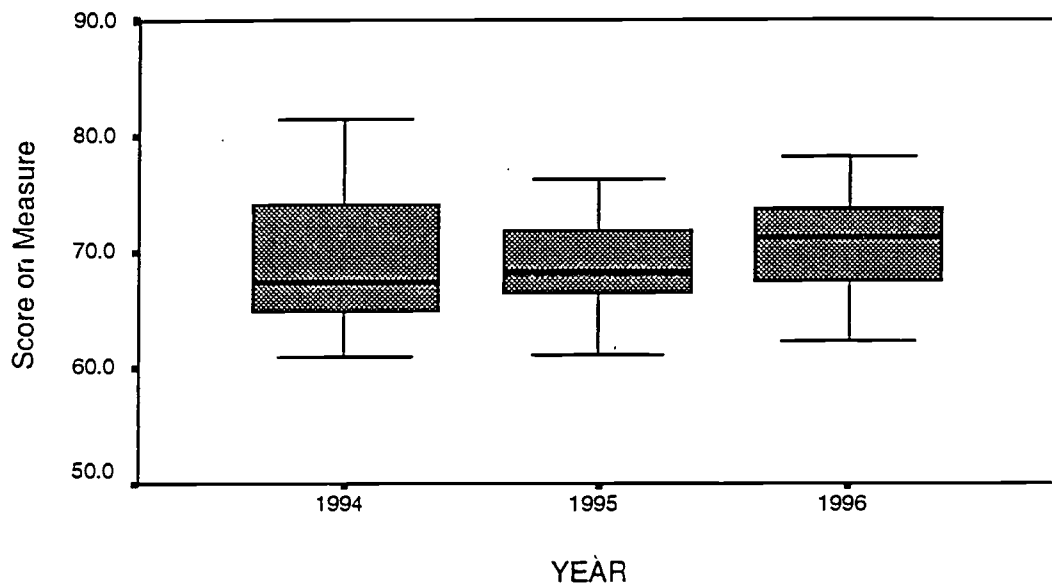


**Figure 7**

**Associate in Arts GPA Performance Measure: Score Measure and as a Percent of Goal**

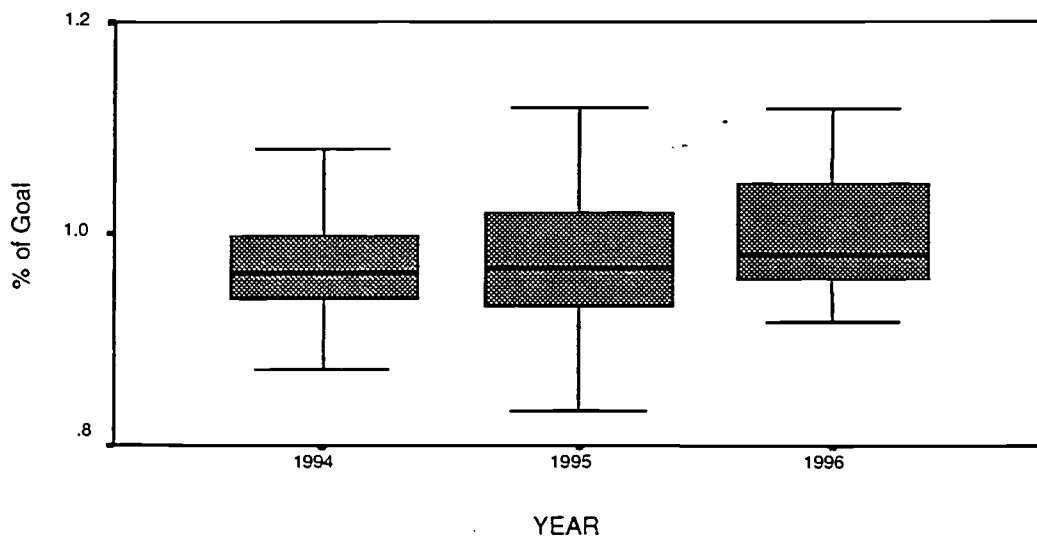
Associate in Arts GPA Performance

GPA = 2.5 and above



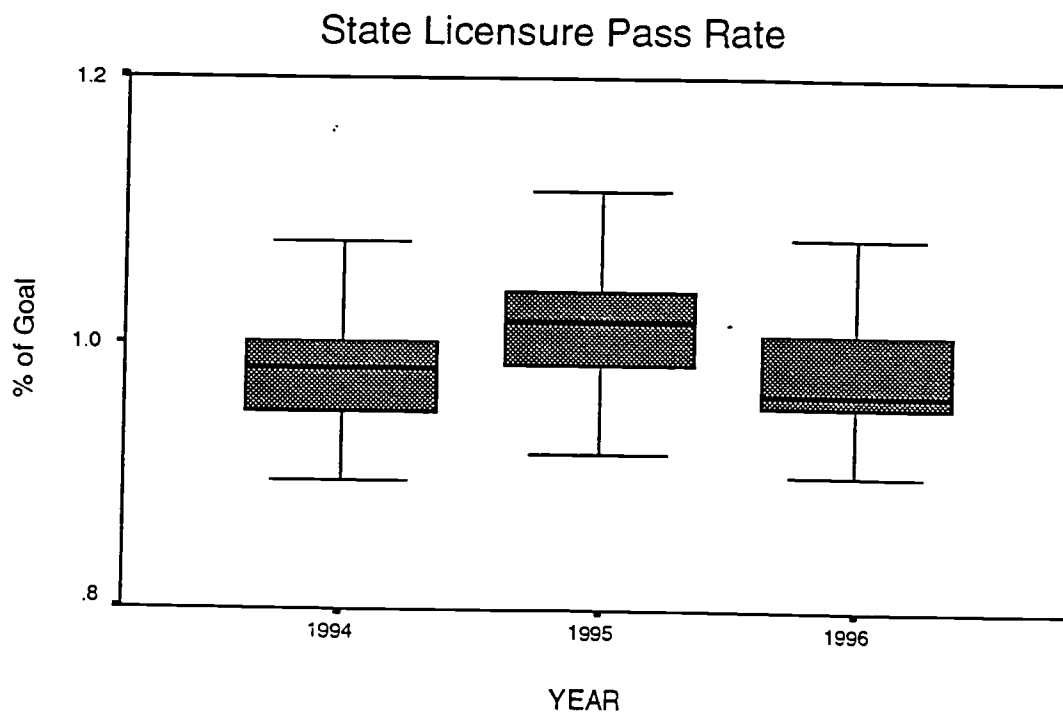
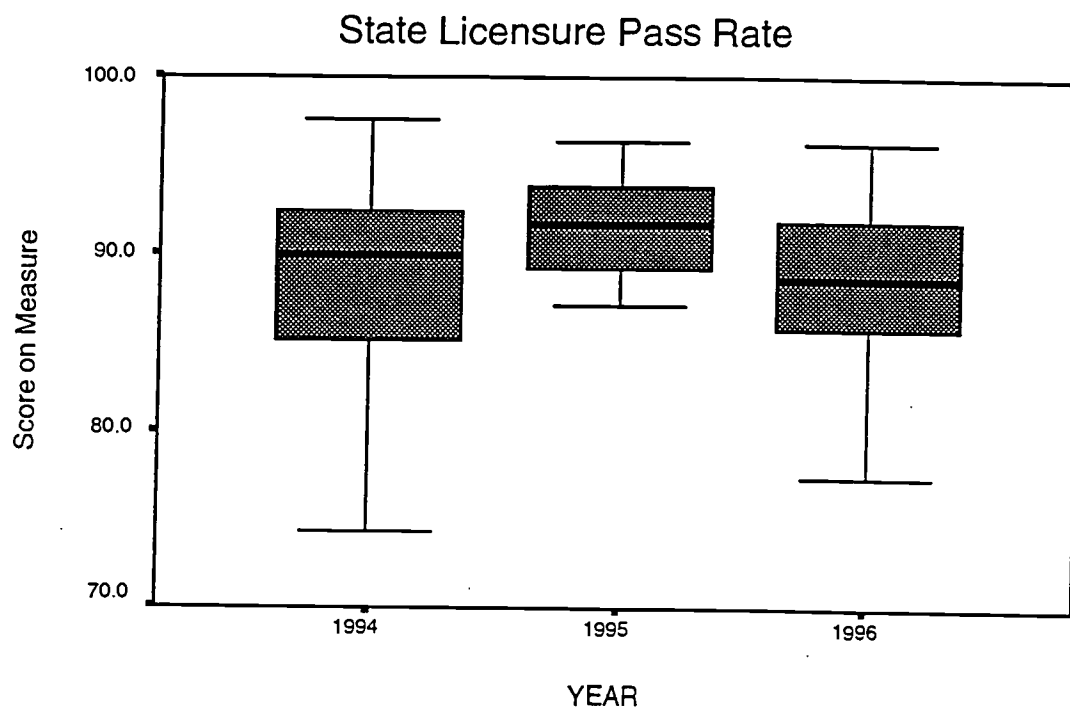
Associate in Arts GPA Performance

GPA = 2.5 and above



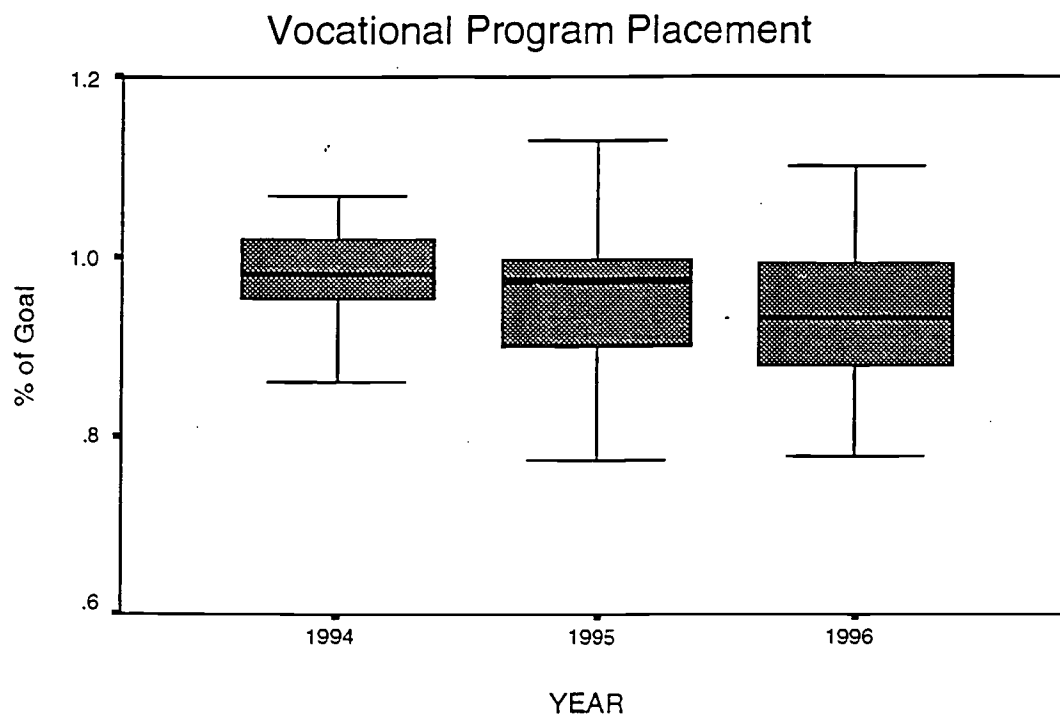
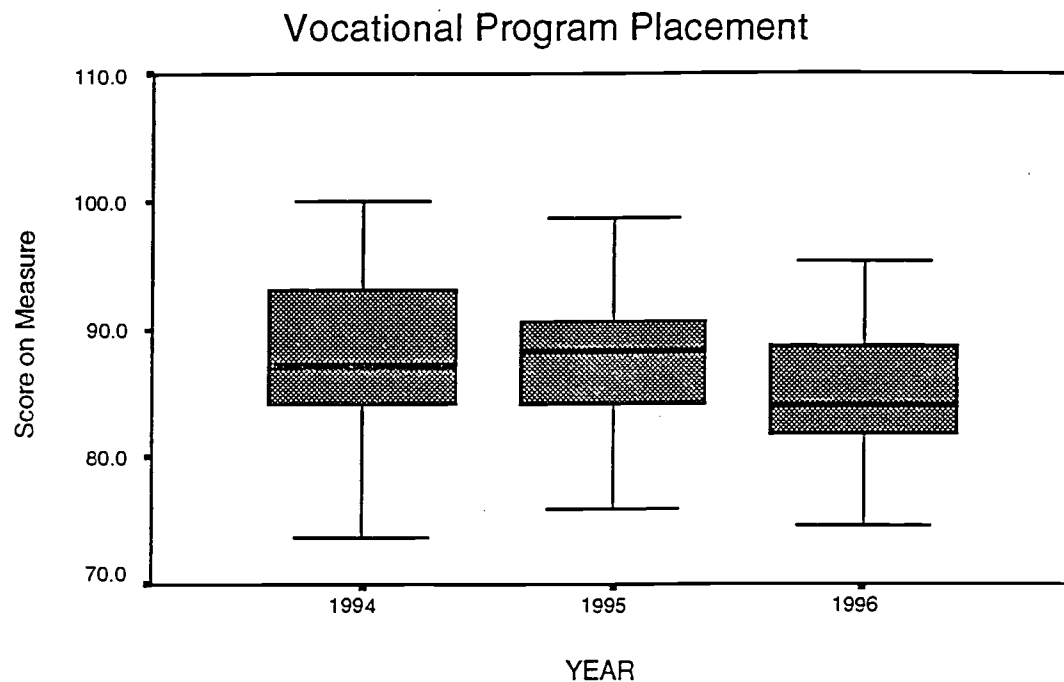
**Figure 8**

**Licensure Pass Rate Measure: Score Measure  
and as a Percent of Goal**



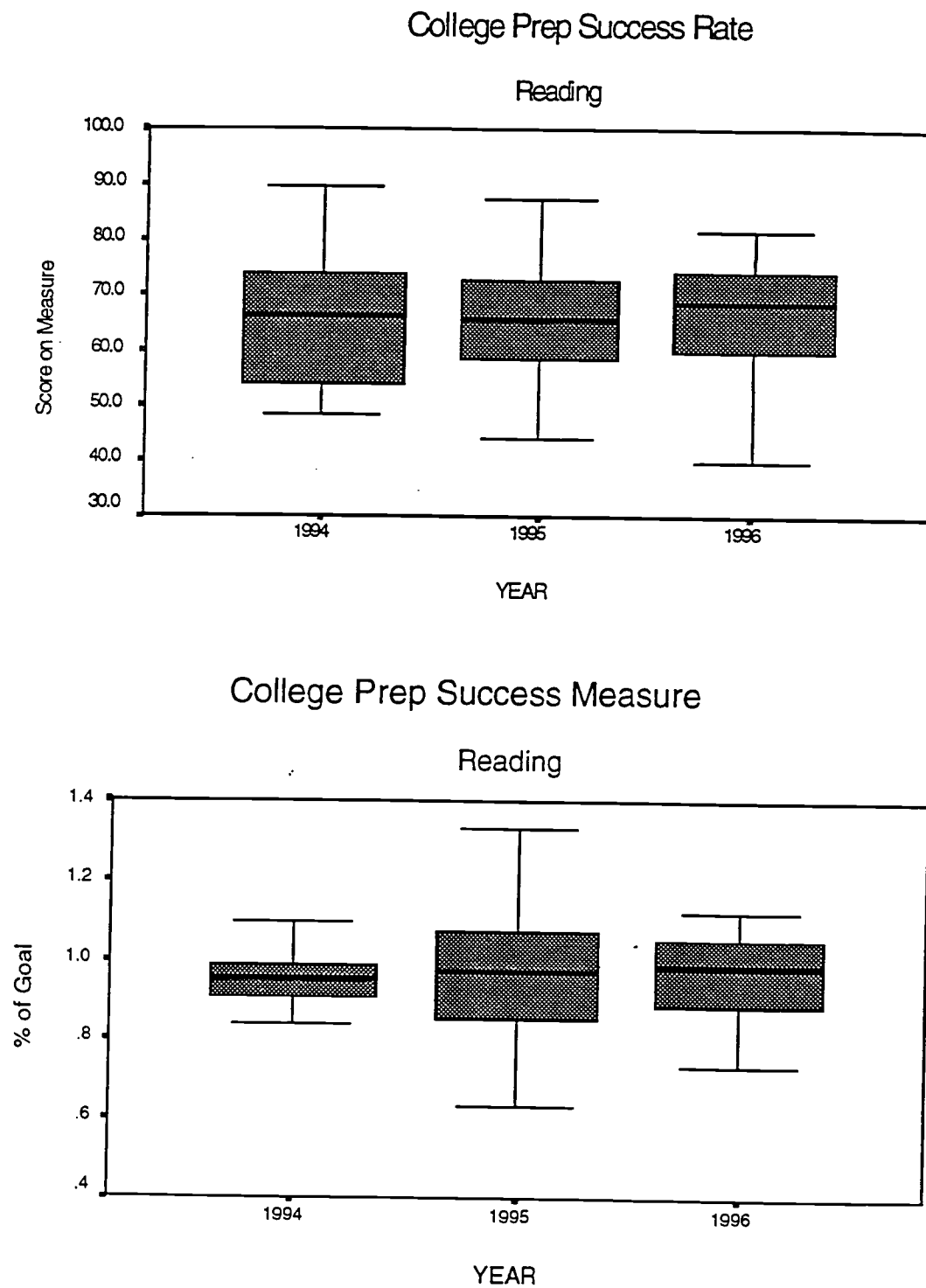
**Figure 9**

**Vocational Program Placement Rate Measure: Score Measure and as a Percent of Goal**



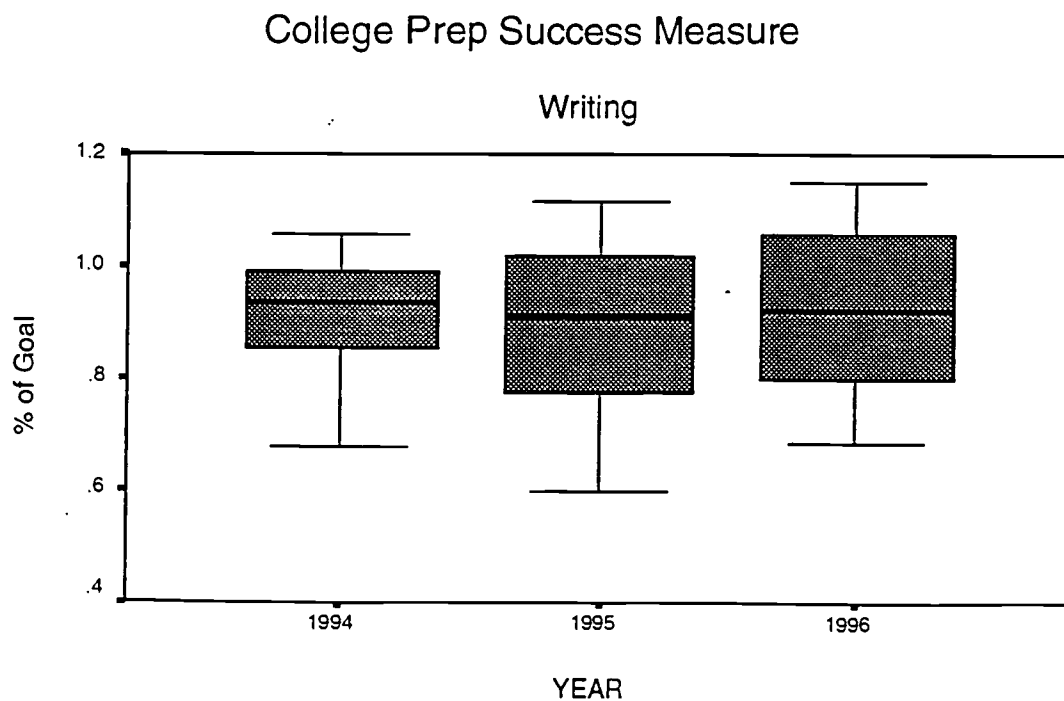
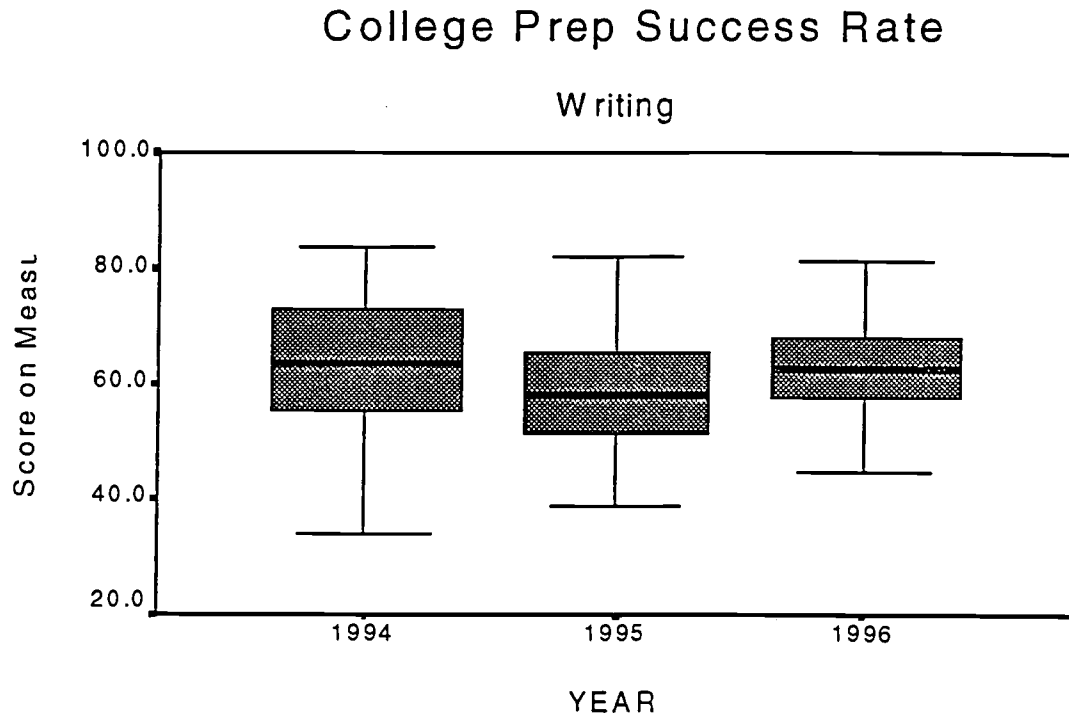
**Figure 10**

**College Preparatory Reading Performance Measure:  
Score Measure and as a Percent of Goal**



**Figure 11**

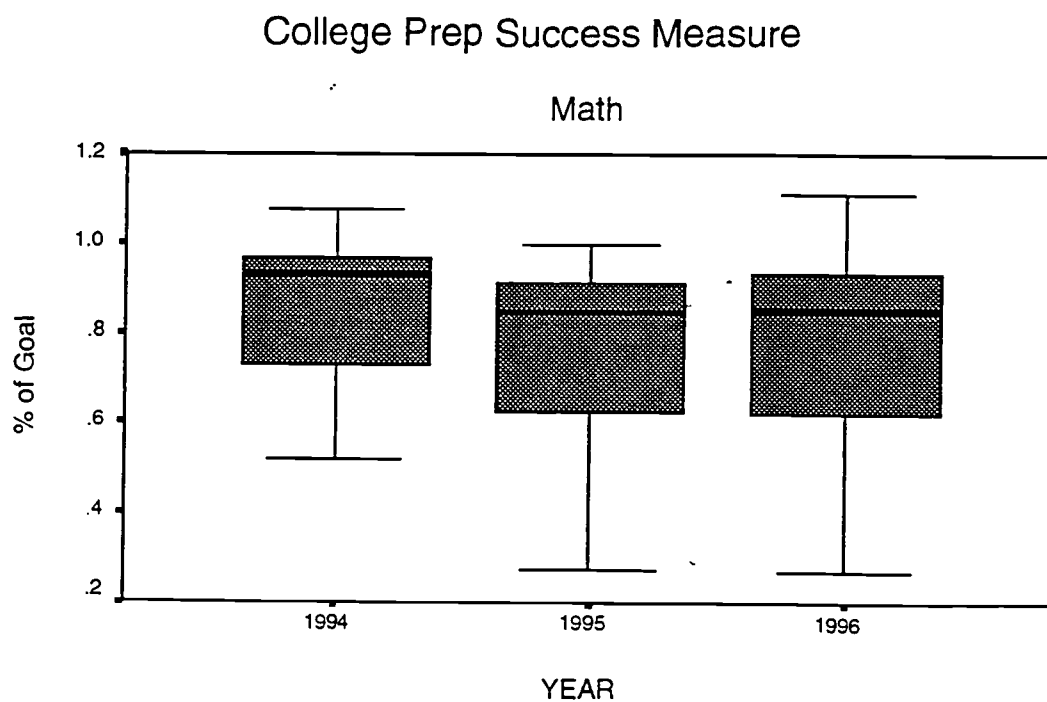
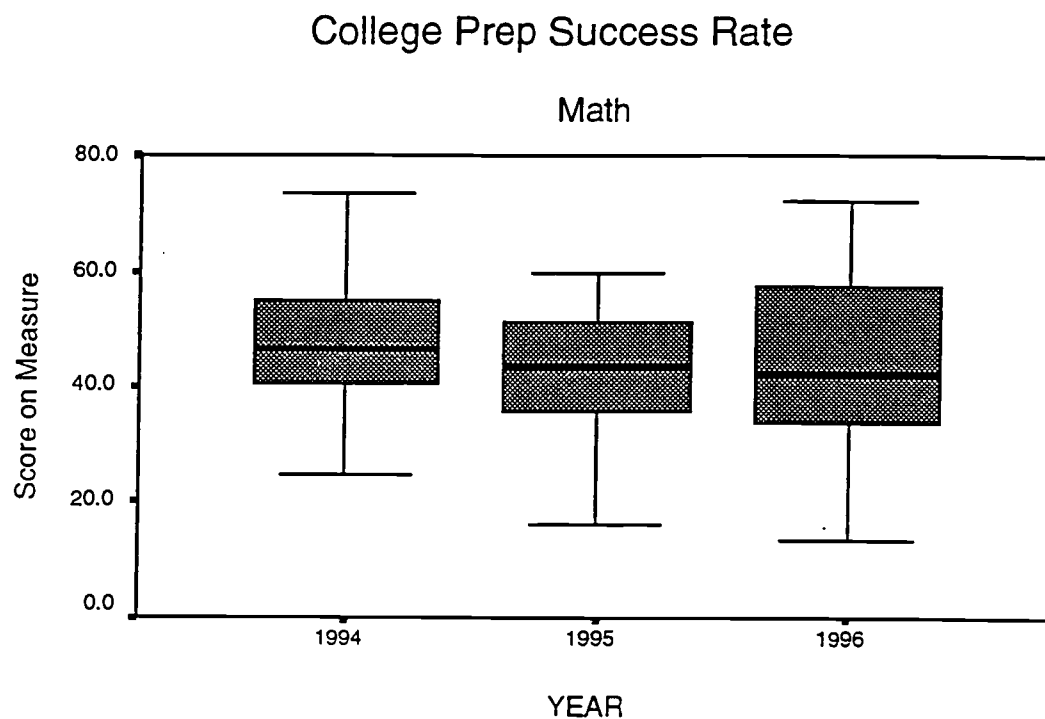
**College Preparatory Writing Performance Measure:  
Score Measure and as a Percent of Goal**





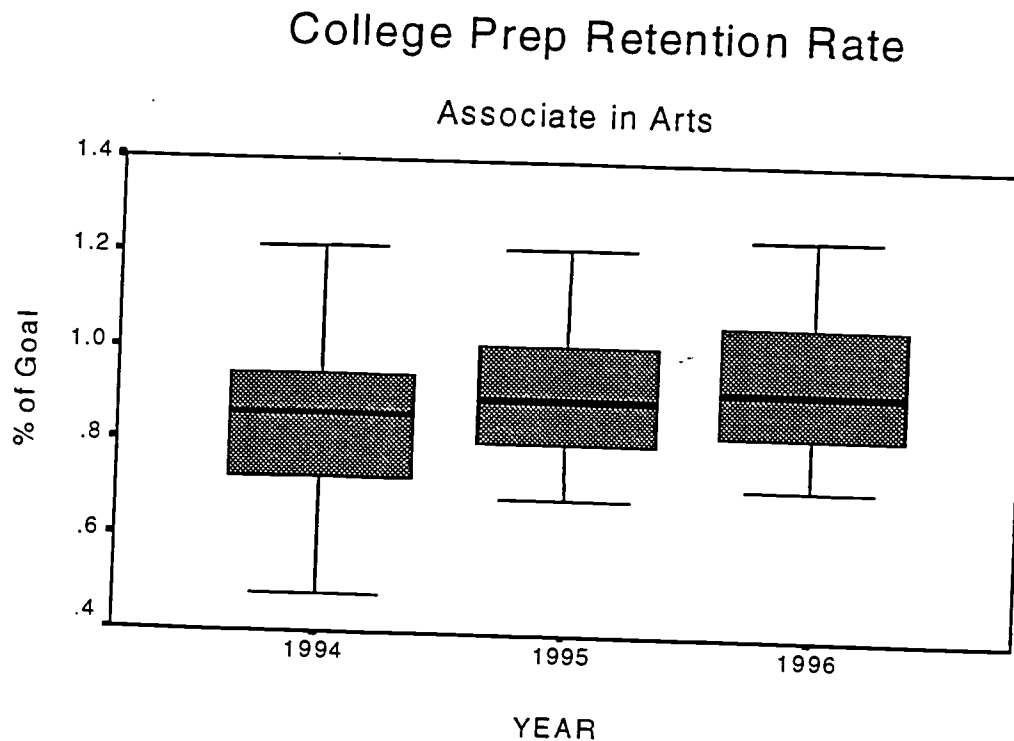
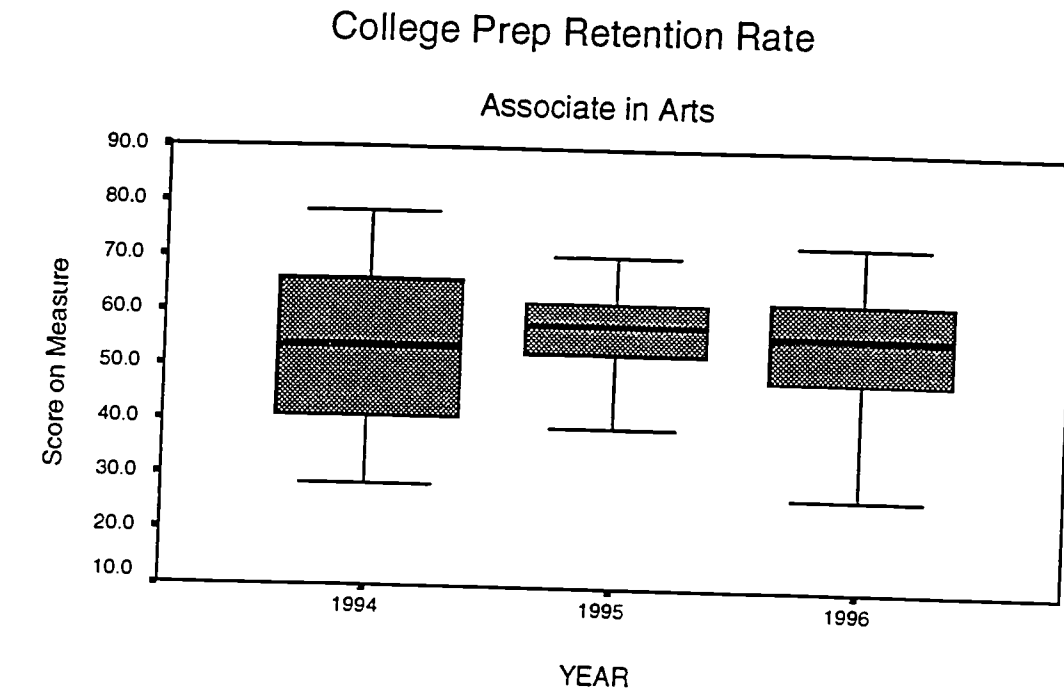
**Figure 12**

**College Preparatory Math Performance Measure:  
Score Measure and as a Percent of Goal**



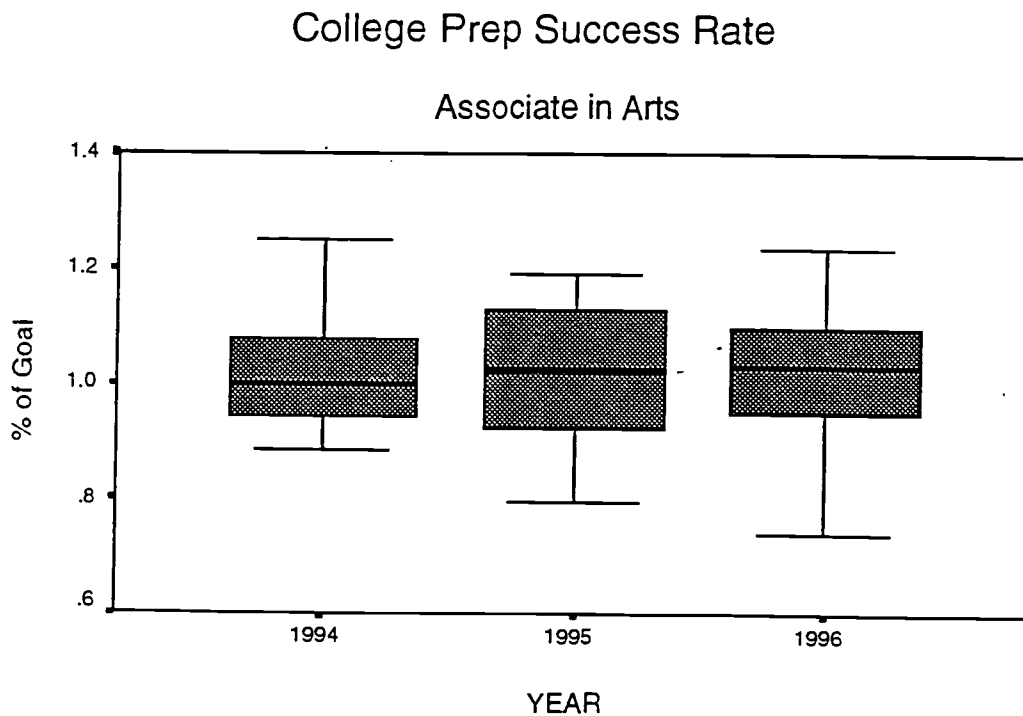
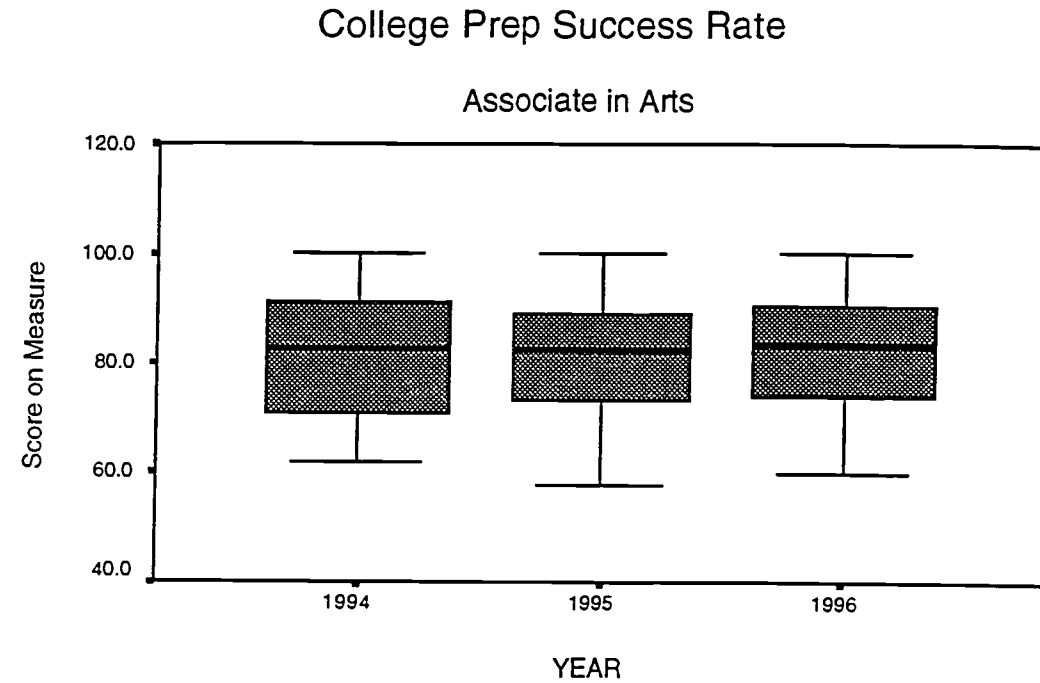
**Figure 13**

**College Preparatory Retention Measure: Score Measure and as a Percent of Goal**



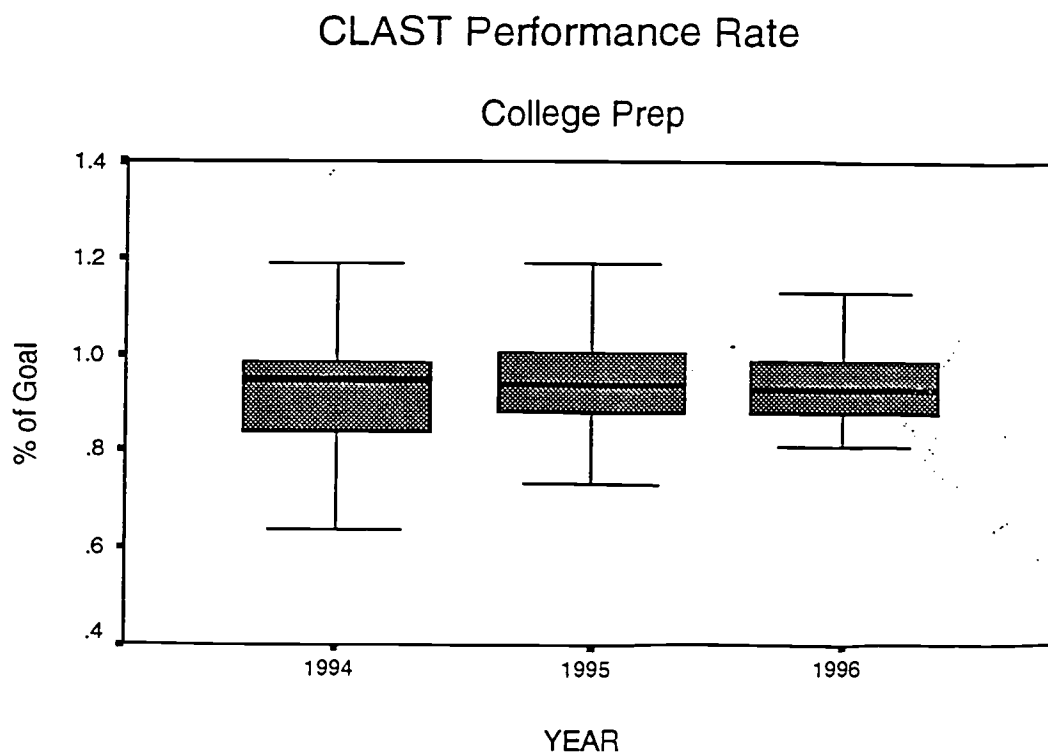
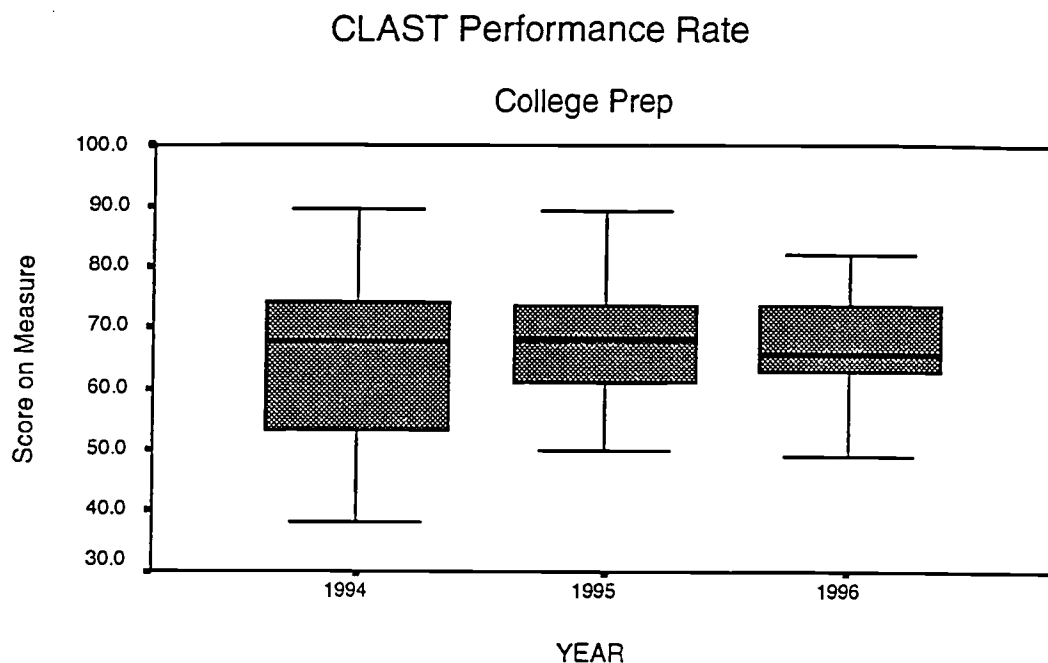
**Figure 14**

**College Preparatory Success Measure: Score Measure and as a Percent of Goal**



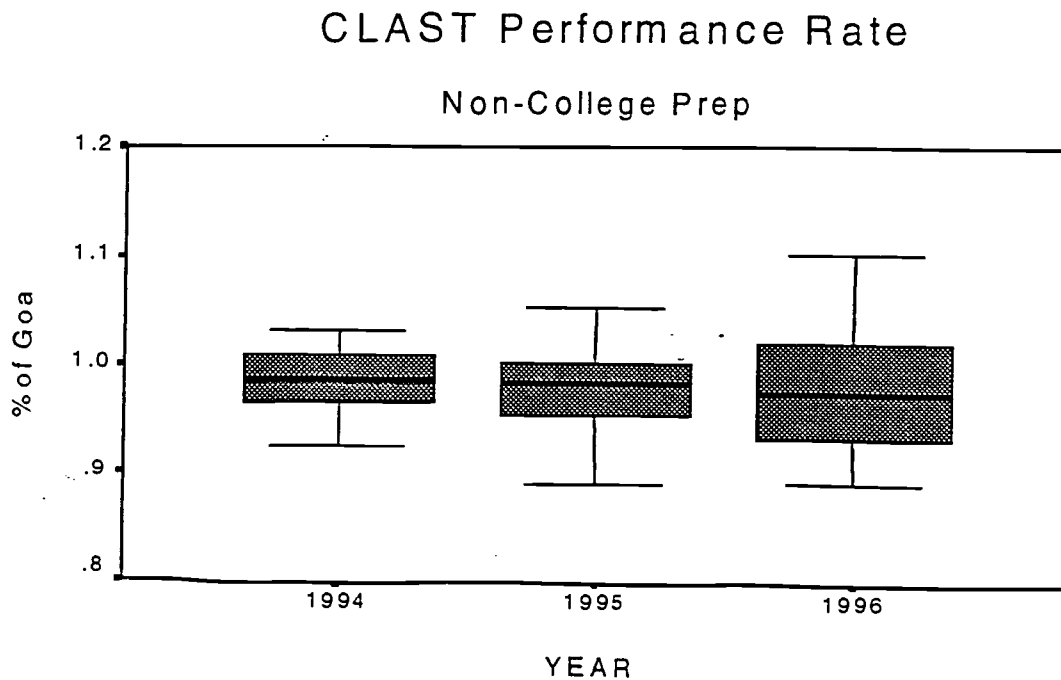
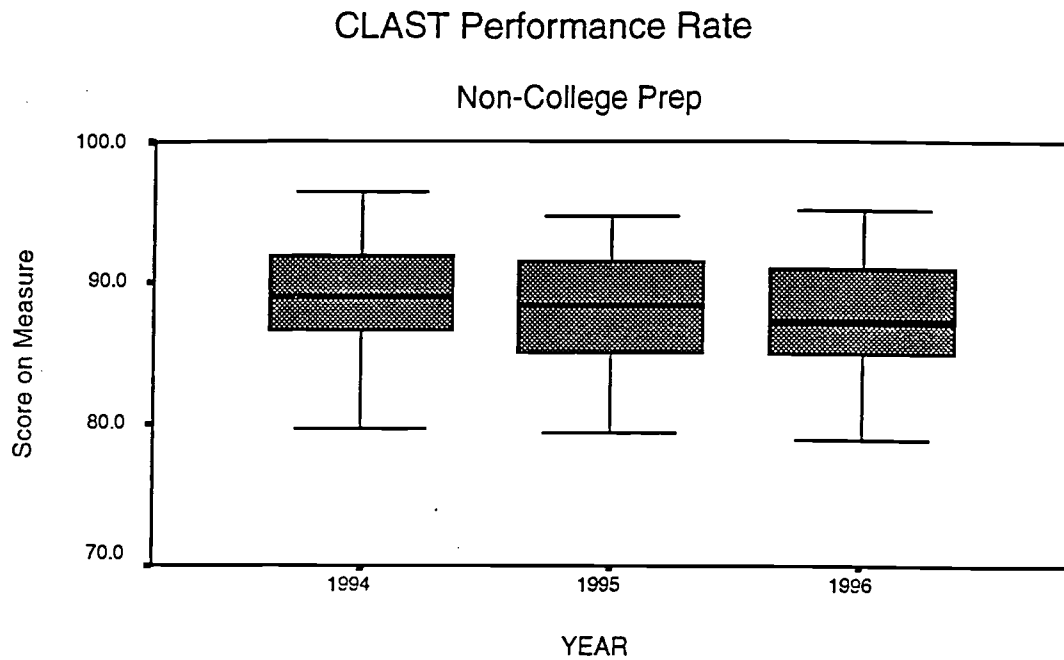
**Figure 15**

**Associate in Arts CLAST Measure – College Preparatory  
Students: Score Measure and as a Percent of Goal**



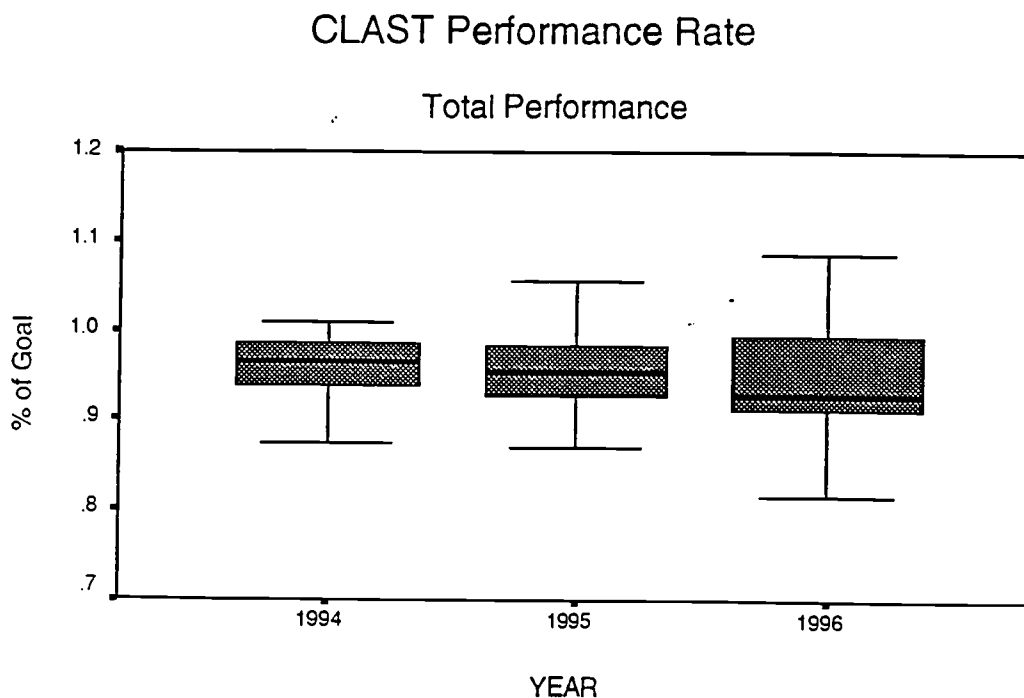
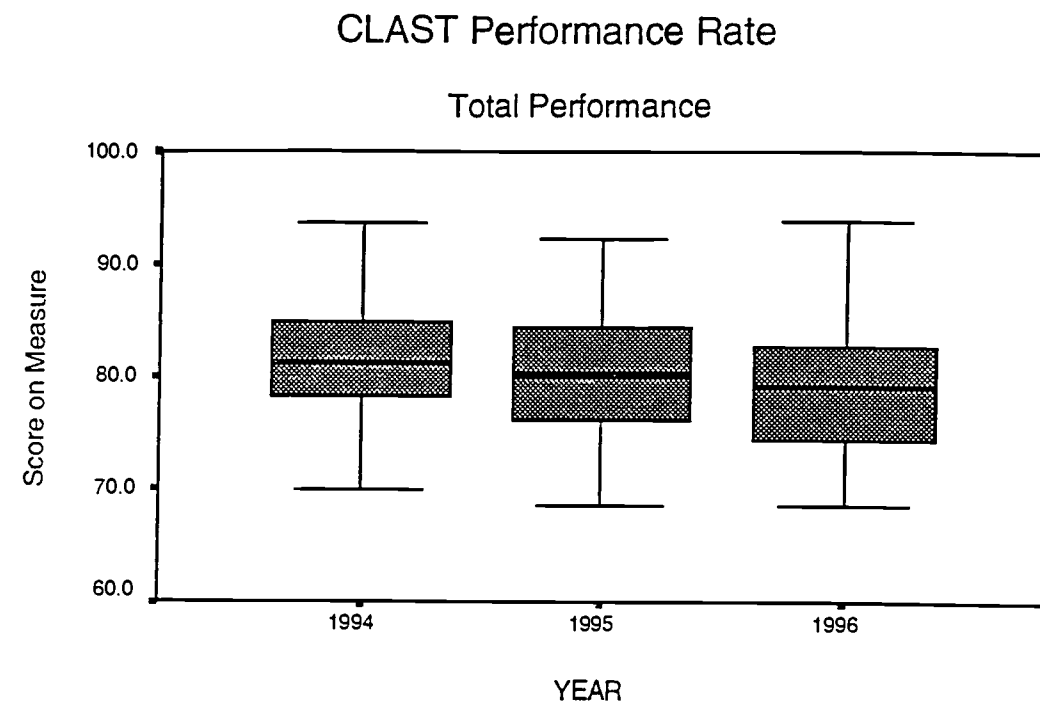
**Figure 16**

**Associate in Arts CLAST Measure – Non-College  
Preparatory Students: Score Measure  
and as a Percent of Goal**



**Figure 17**

**Associate in Arts CLAST Measure – All Students:  
Score Measure and as a Percent of Goal**

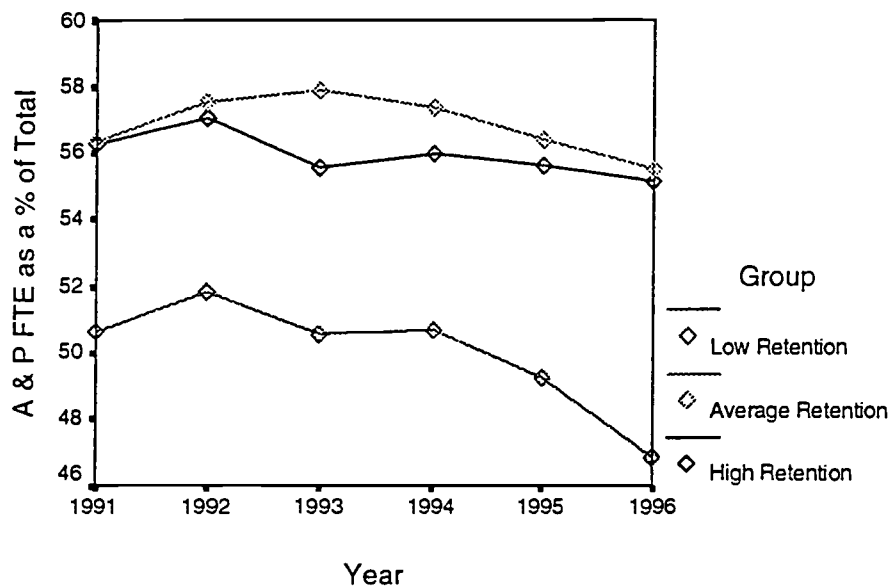


**Figure 18**

**Retention and Success Rate: Associate in Arts  
By A & P FTE as a % of Total By Group**

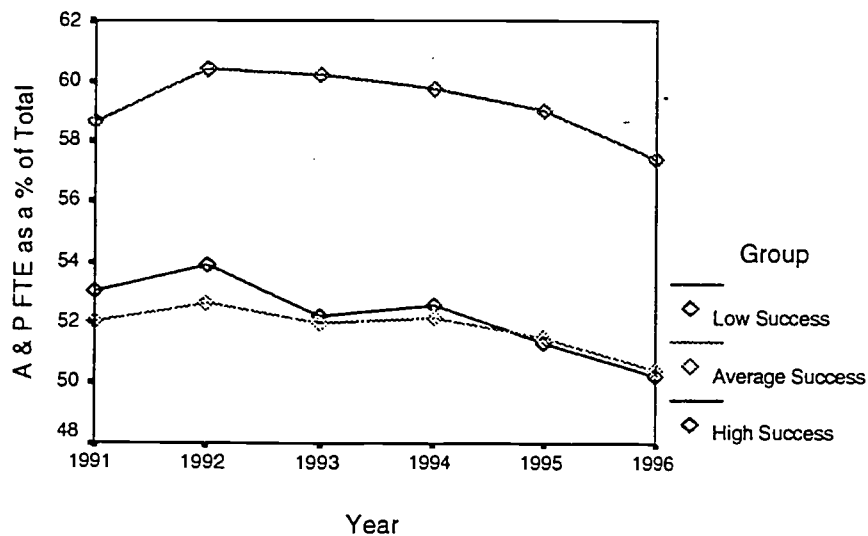
Retention Rate: Associate in Arts

By College Group



Success Rate: Associate in Arts

By College Group

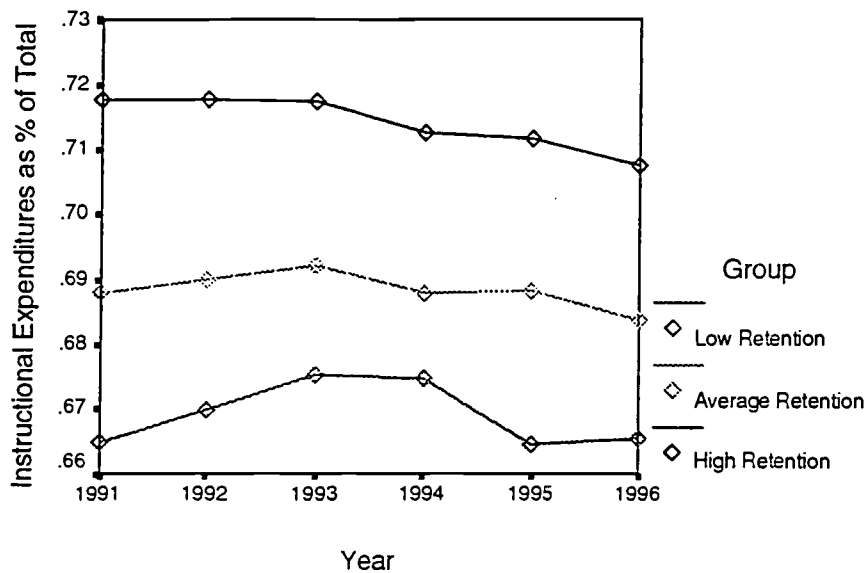


**Figure 19**

**Retention and Success Rate: Associate in Arts  
By Instructional Expenditures as % of Total By Group**

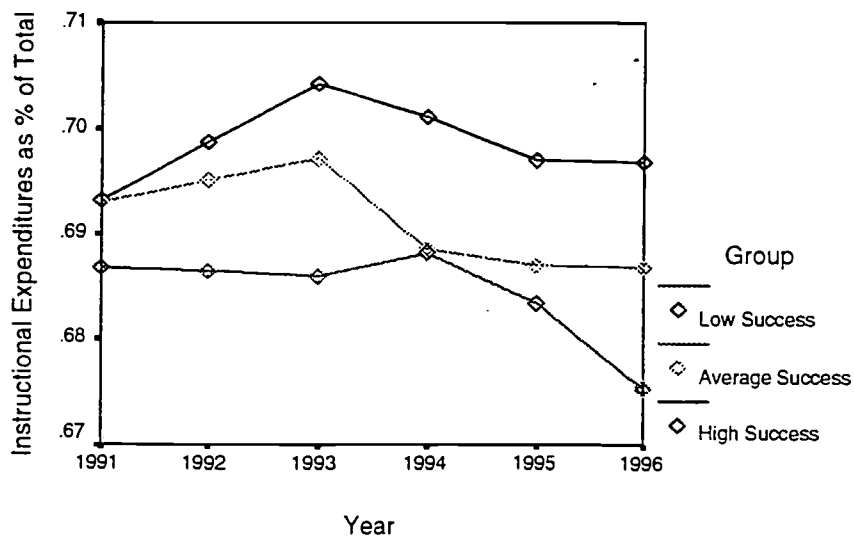
Retention Rate: Associate in Arts

By College Group



Success Rate: Associate in Arts

By College Group



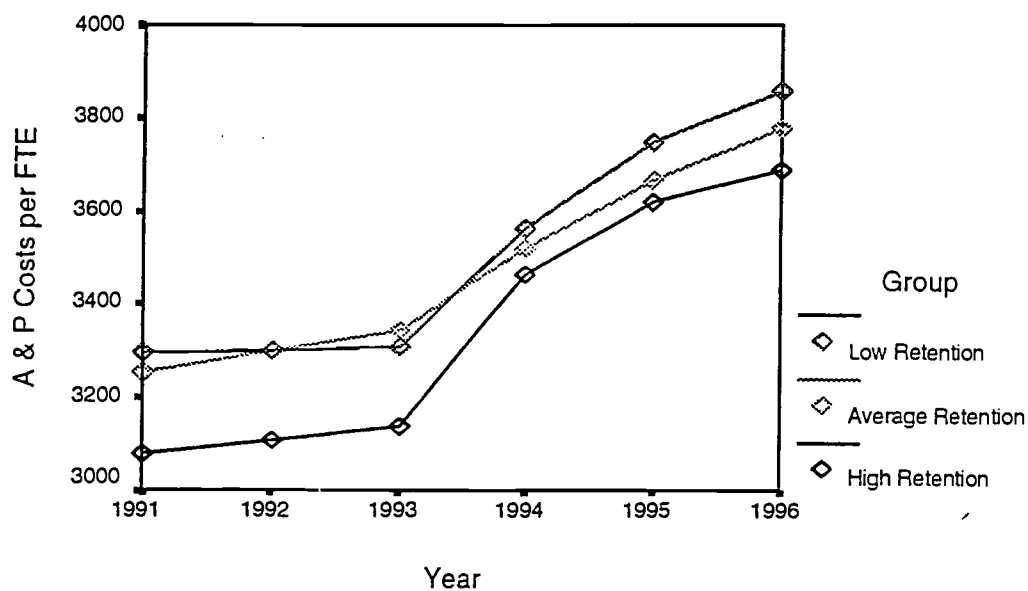


**Figure 20**

**Retention and Success Rate: Associate in Arts  
By A & P Costs Per FTE By Group**

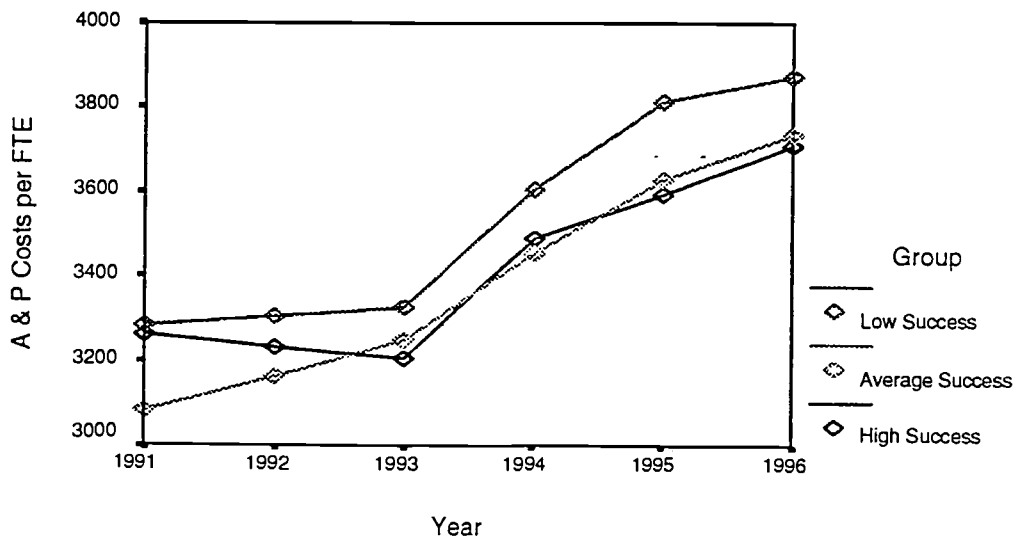
Retention Rate: Associate in Arts

By College Group



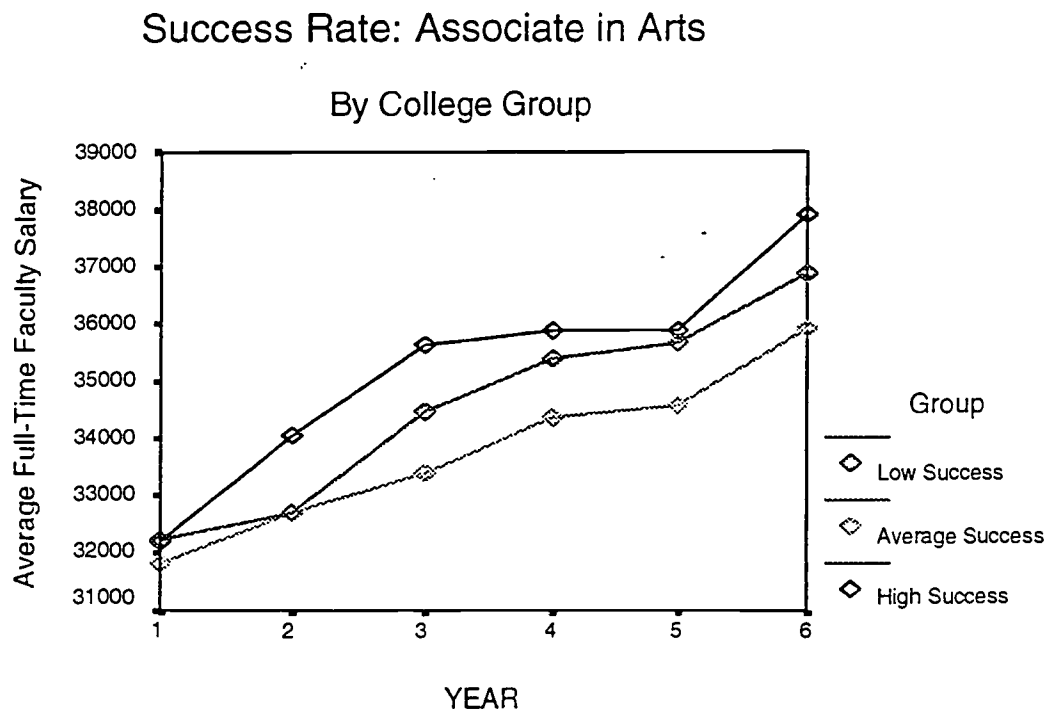
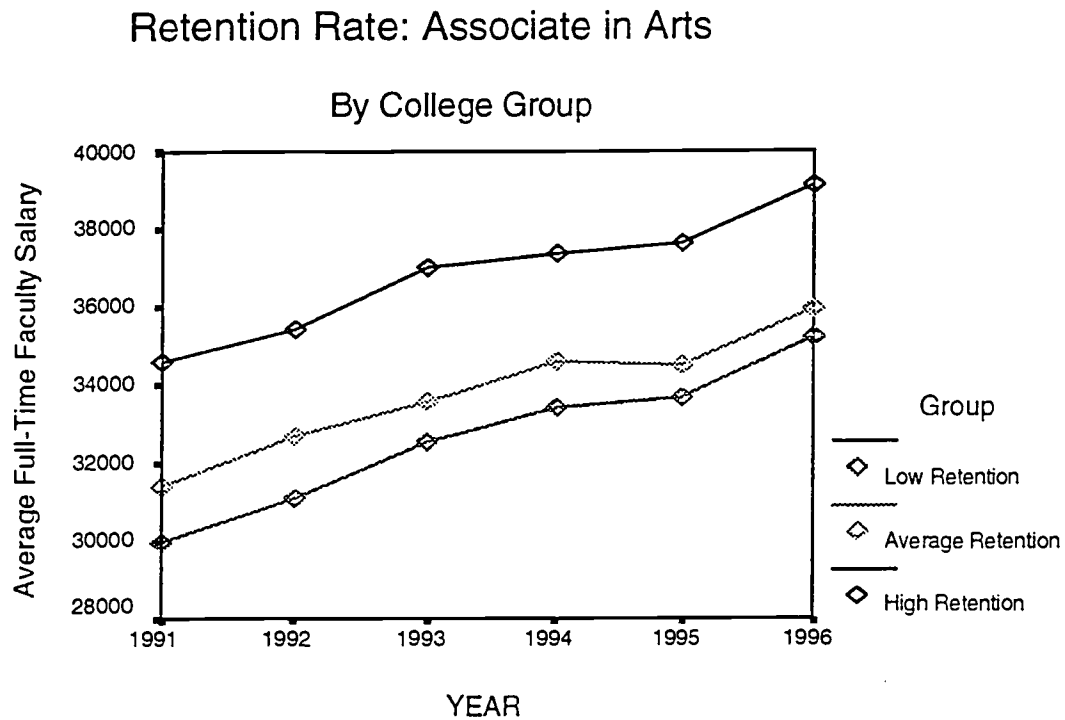
Success Rate: Associate in Arts

By College Group



**Figure 21**

**Retention and Success Rate: Associate in Arts  
By Average Full Time Faculty Salary by Group**

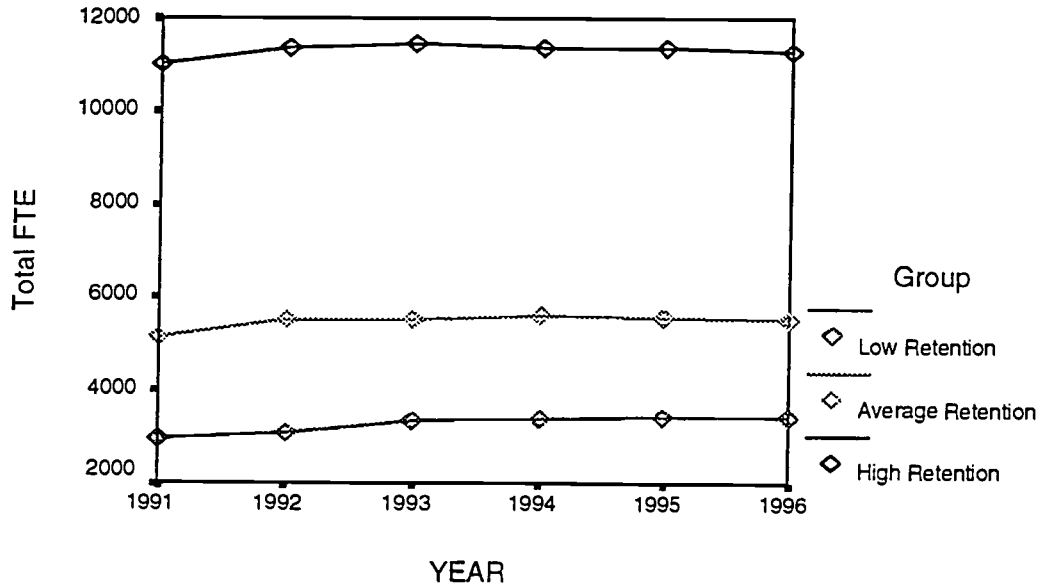


**Figure 22**

**Retention and Success Rate: Associate in Science  
By Total FTE by Group**

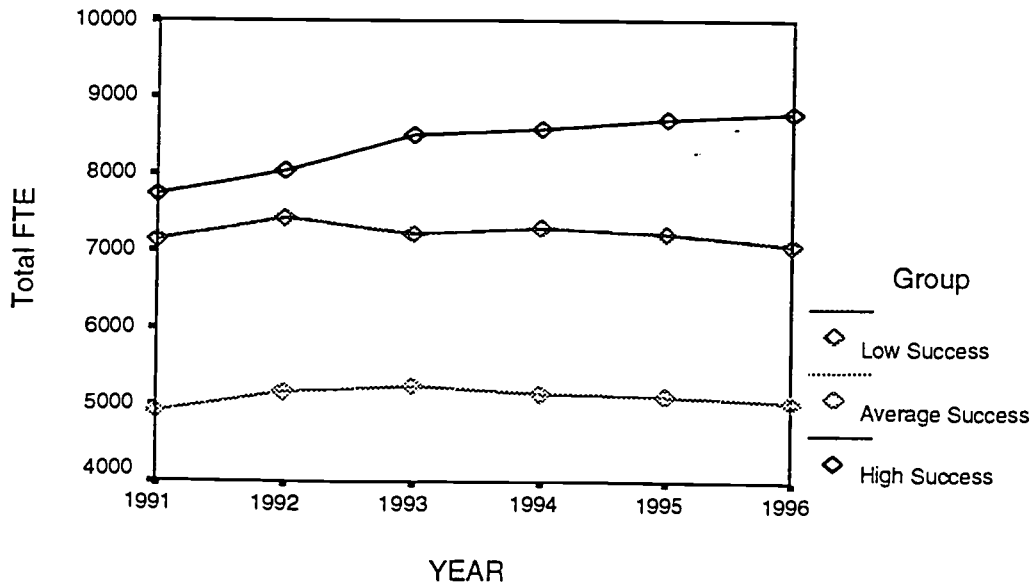
Retention Rate: Associate in Arts

By College Group



Success Rate: Associate in Arts

By College Group

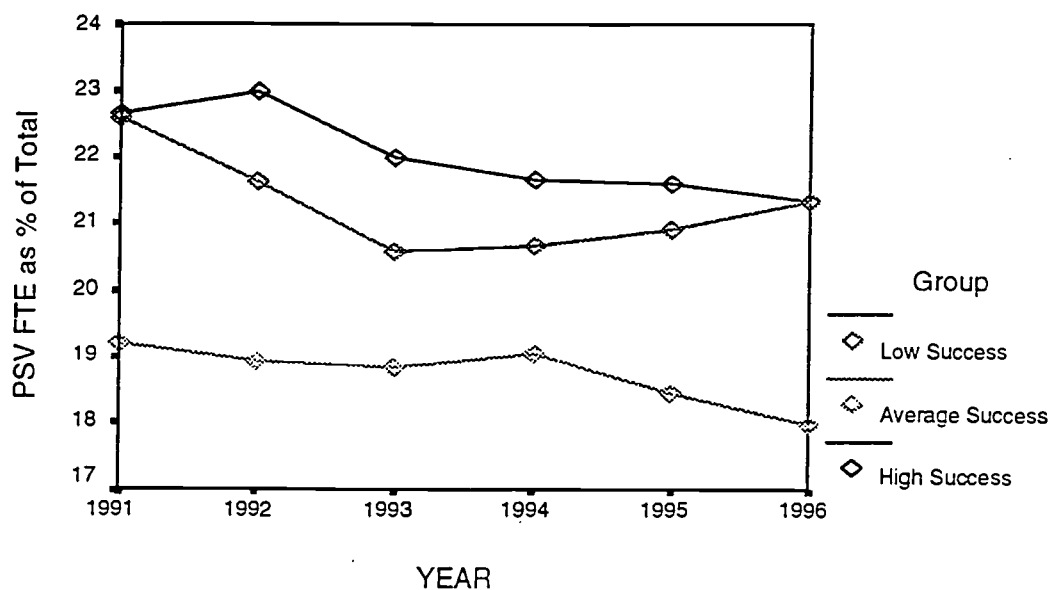


**Figure 23**

**Retention and Success Rate: Associate in Science  
By PSV FTE as % of Total By Group**

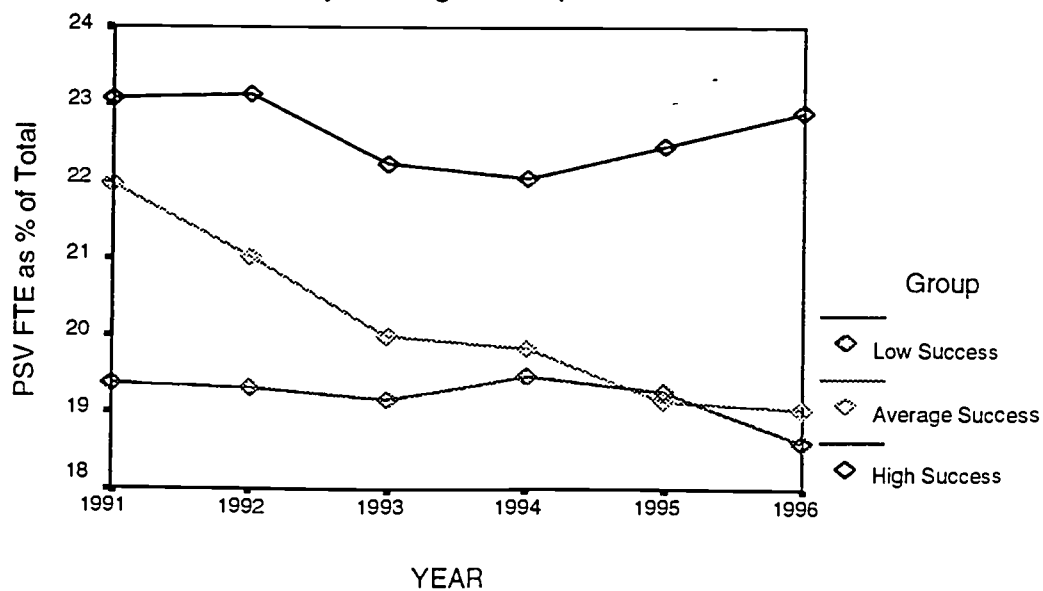
Retention Rate: Associate in Science

By College Group



Success Rate: Associate in Science

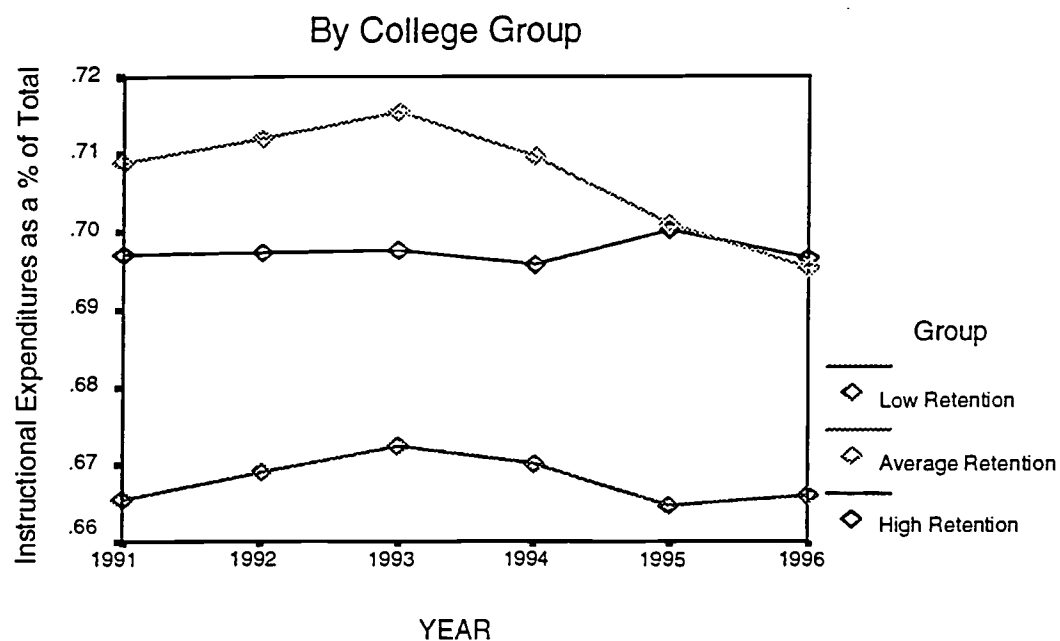
By College Group



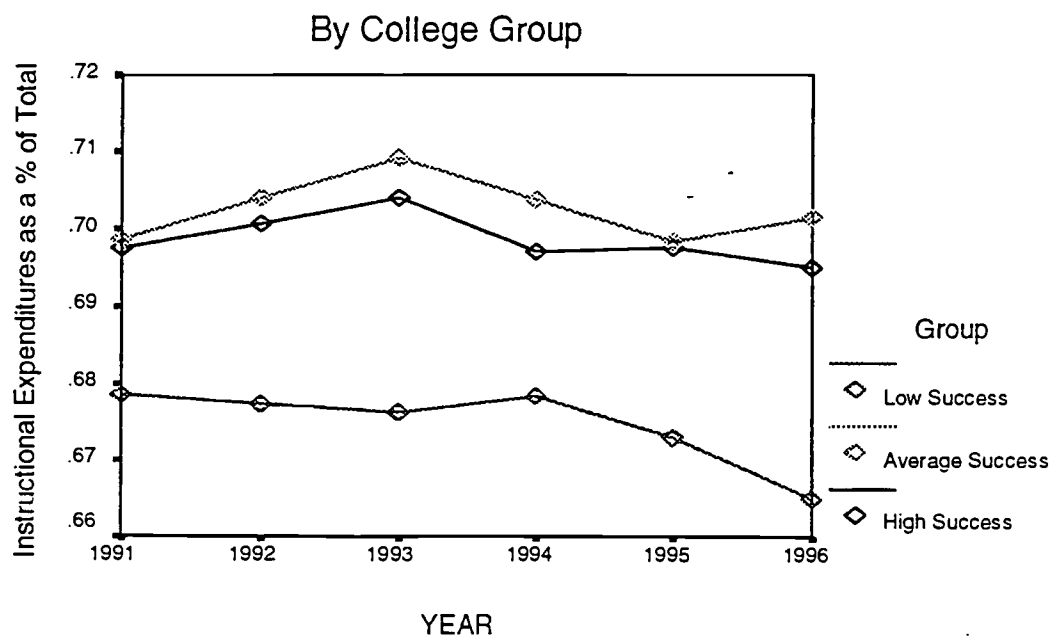
**Figure 24**

**Retention and Success Rate: Associate in Science  
By Instructional Expenditures as % of Total By Group**

**Retention Rate: Associate in Science**



**Success Rate: Associate in Science**

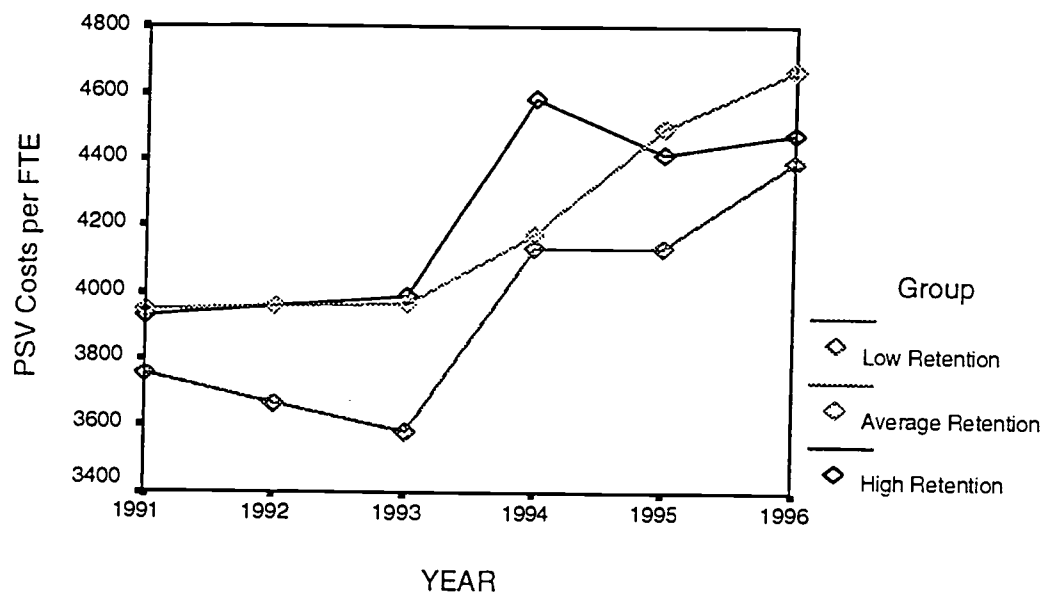


**Figure 25**

**Retention and Success Rate: Associate in Science  
By PSV Costs per FTE By Group**

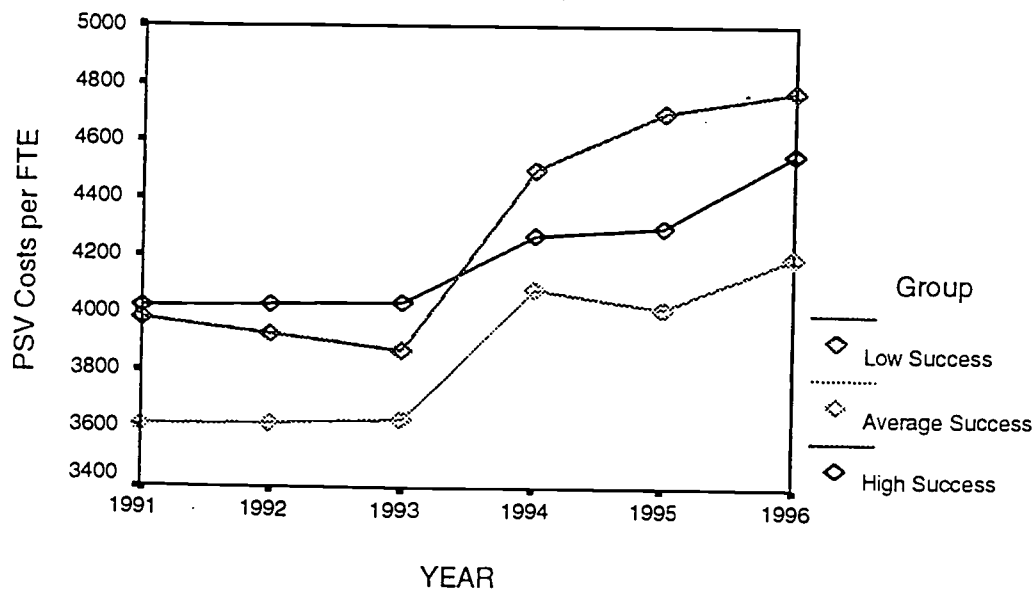
Retention Rate: Associate in Science

By College Group



Success Rate: Associate in Science

By College Group

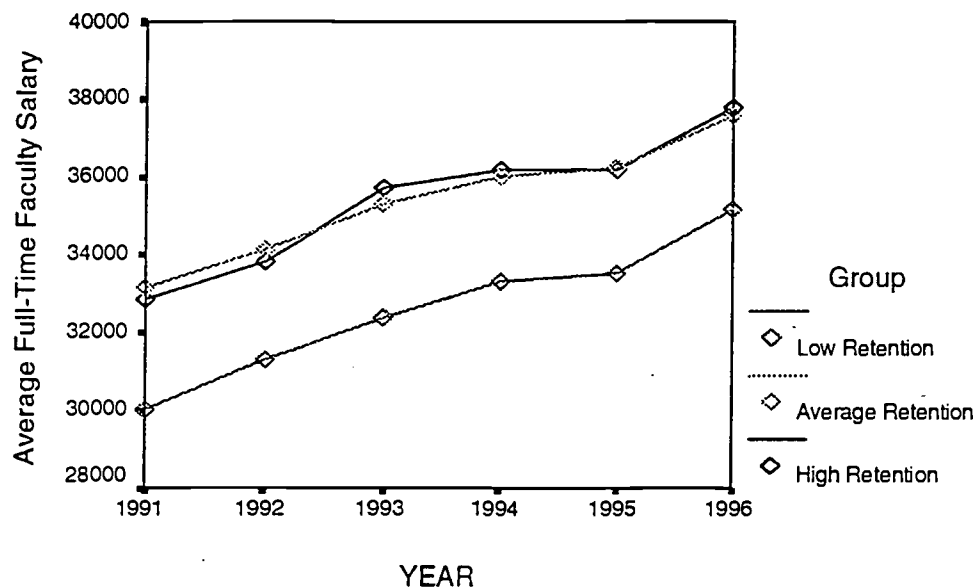


**Figure 26**

**Retention and Success Rate: Associate in Science  
By Average Full-Time Faculty Salary By Group**

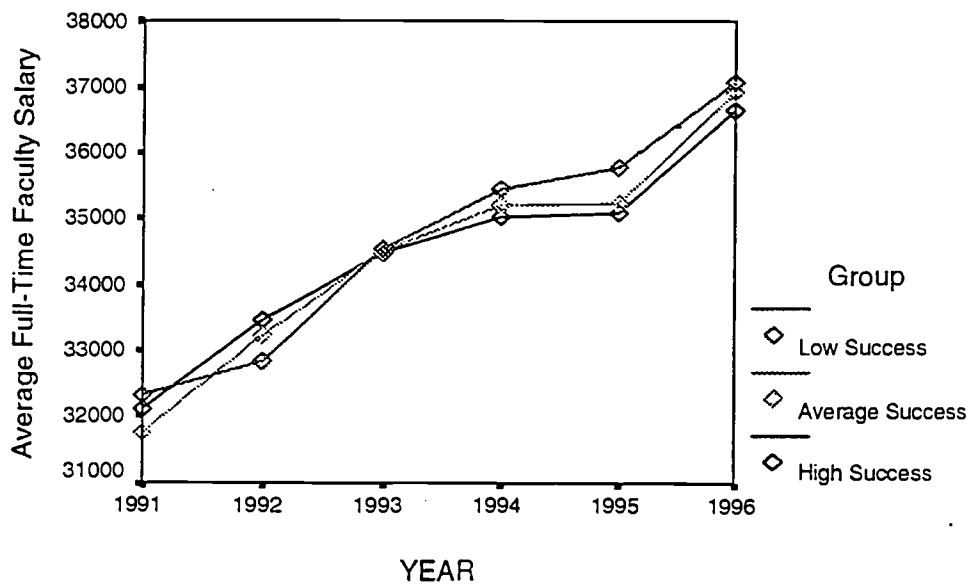
Retention Rate: Associate in Science

By College Group



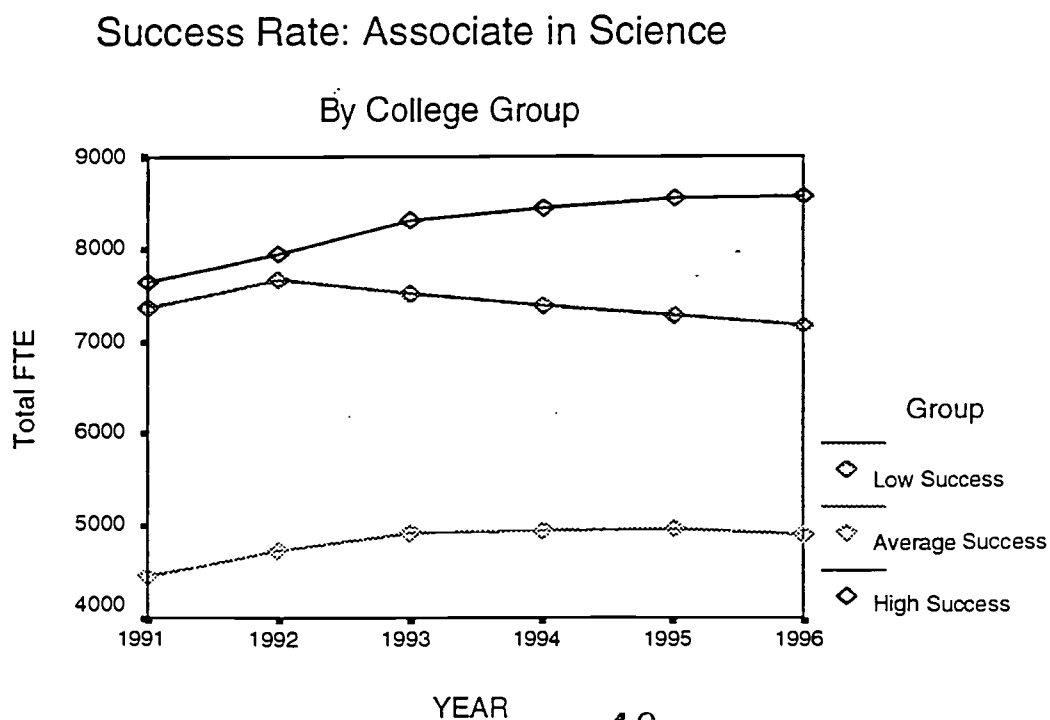
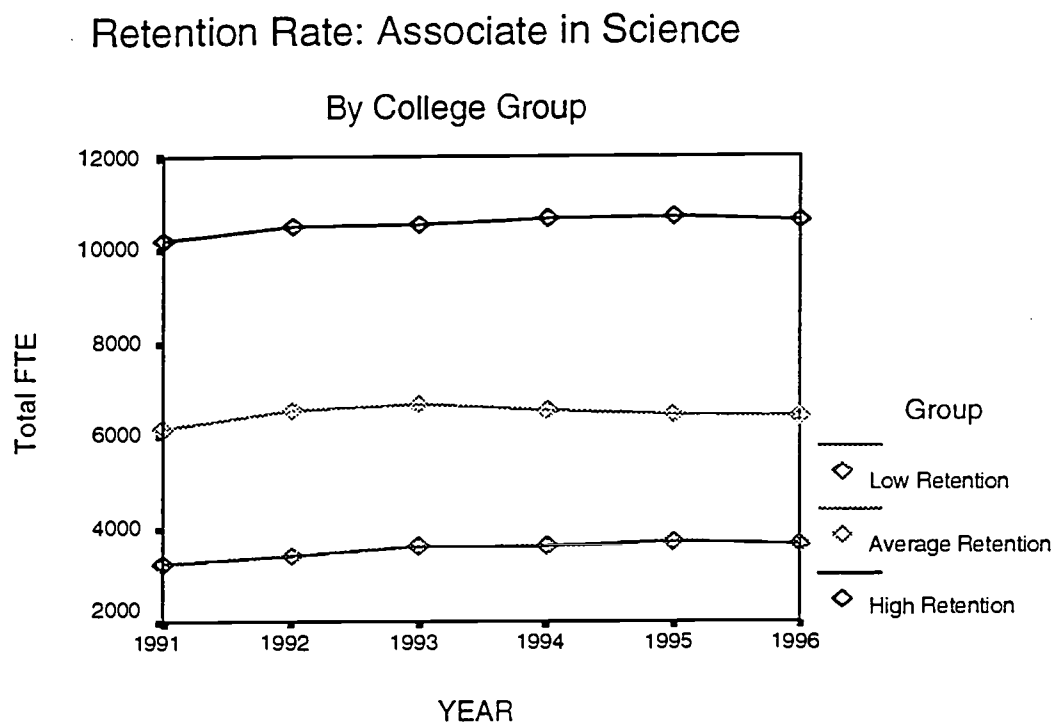
Success Rate: Associate in Science

By College Group



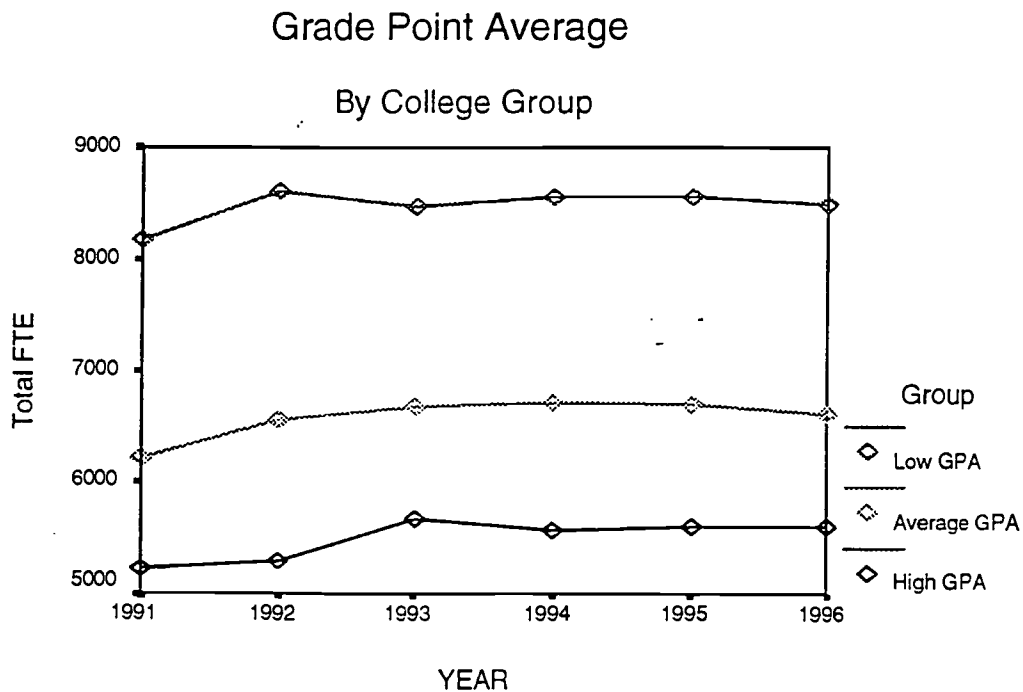
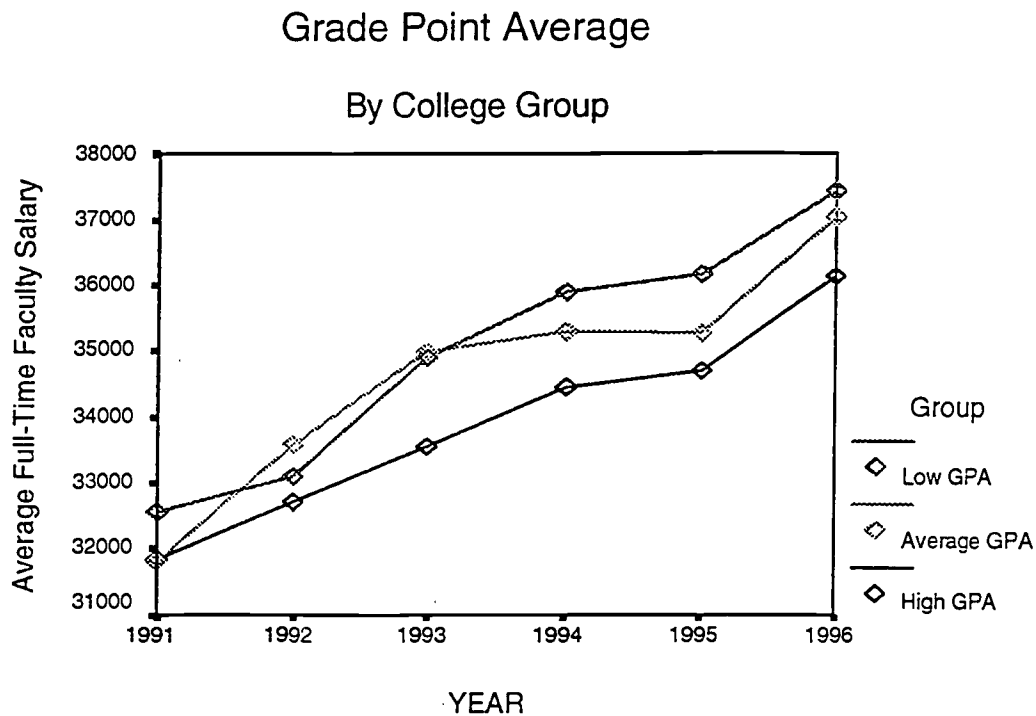
**Figure 27**

**Retention and Success Rate: Associate in Science  
By of Total FTE By Group**

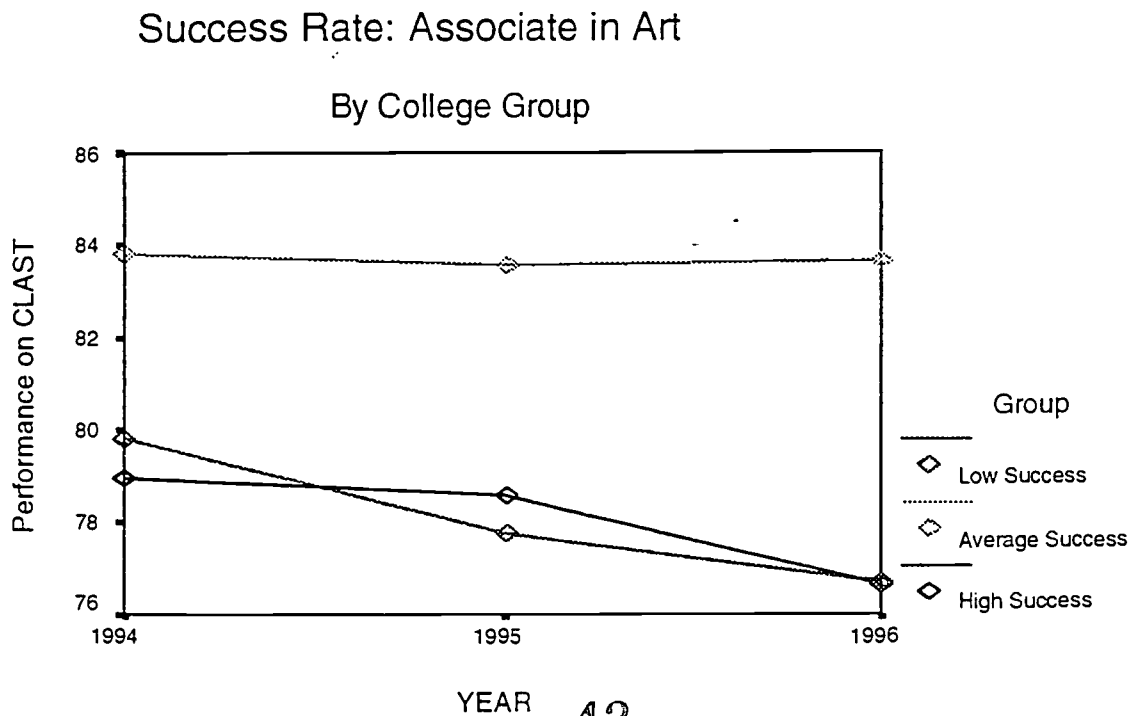
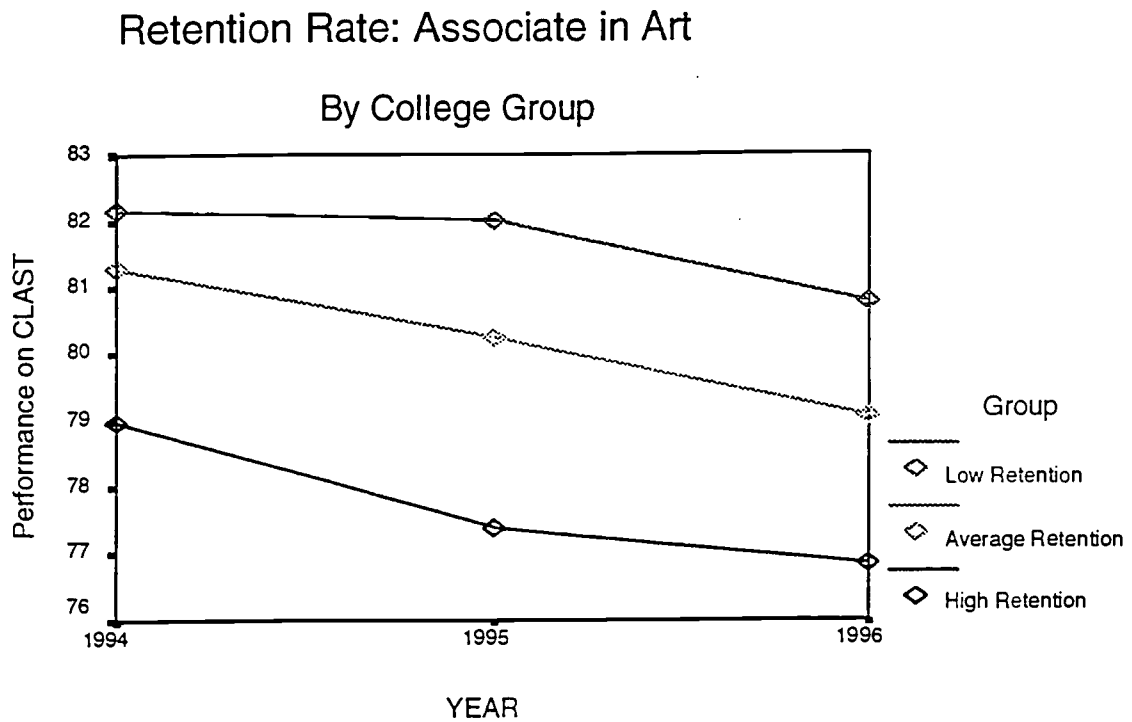




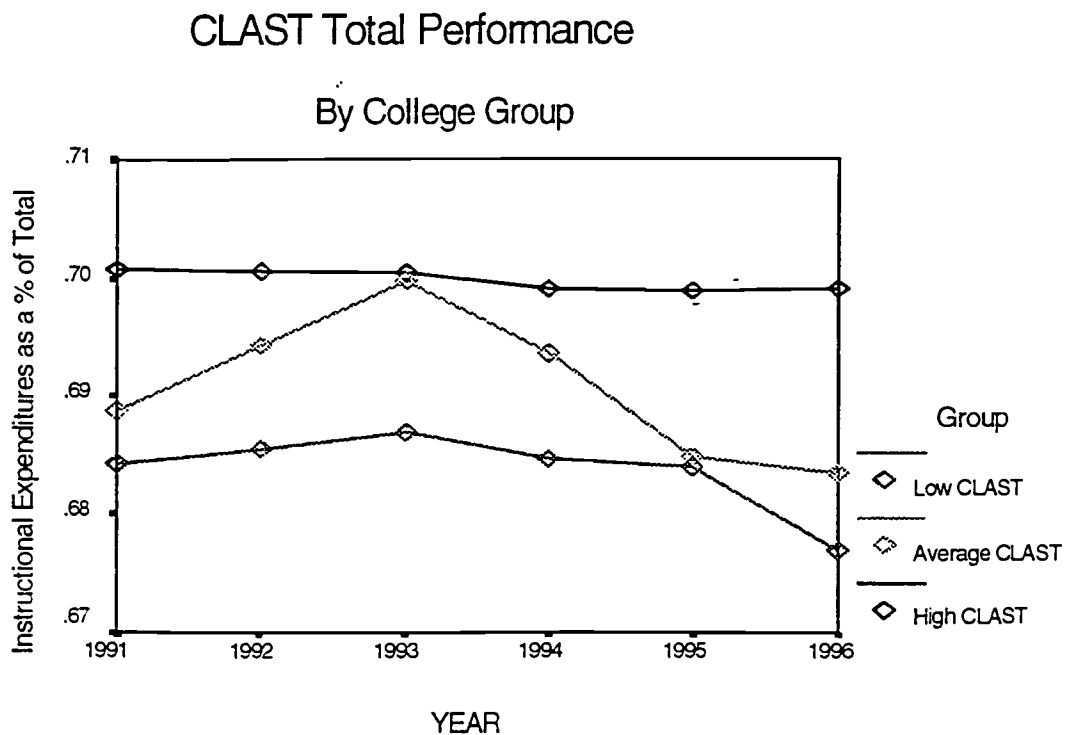
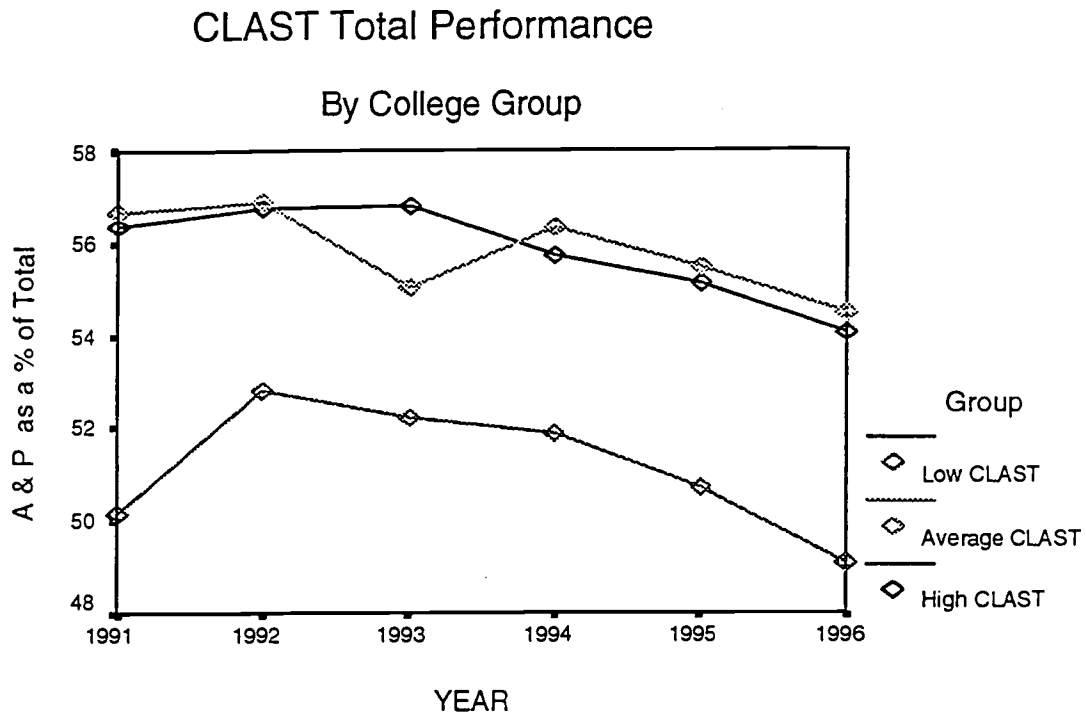
**Figure 28**  
**Associate of Arts Transfer Student Performance by**  
**Average Faculty Salary and Total FTE by Group**



**Figure 29**  
**Retention and Success Rate: Associate in Arts by**  
**Performance on CLAST by Group**



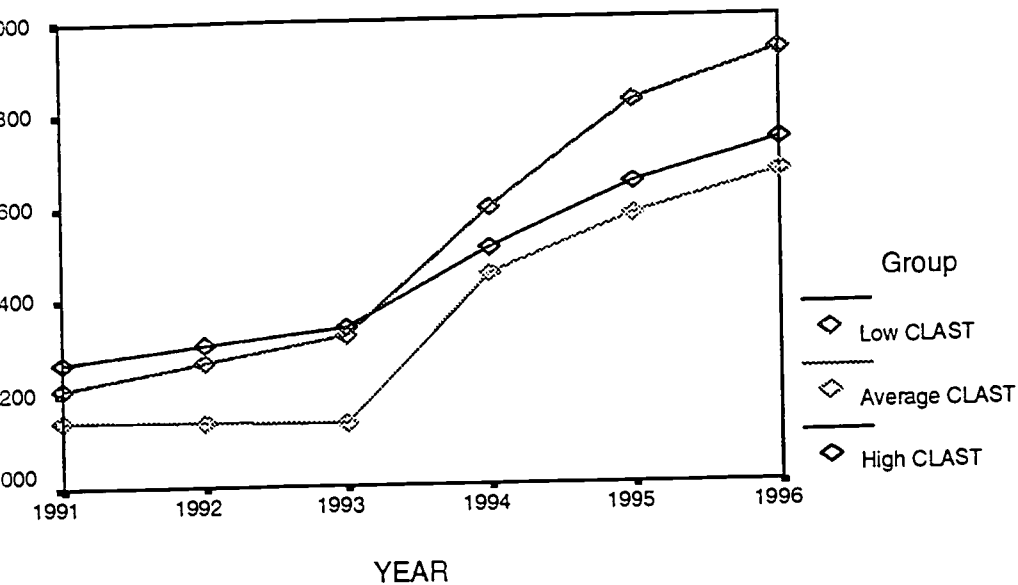
**Figure 30**  
**Associate in Arts CLAST Measure**  
**Total A&P and Instructional Expenditures**  
**as a Percent of Total by Group**



**Figure 31**  
**Associate of Arts CLAST Measure**  
**and College Preparatory Costs per FTE by Group**

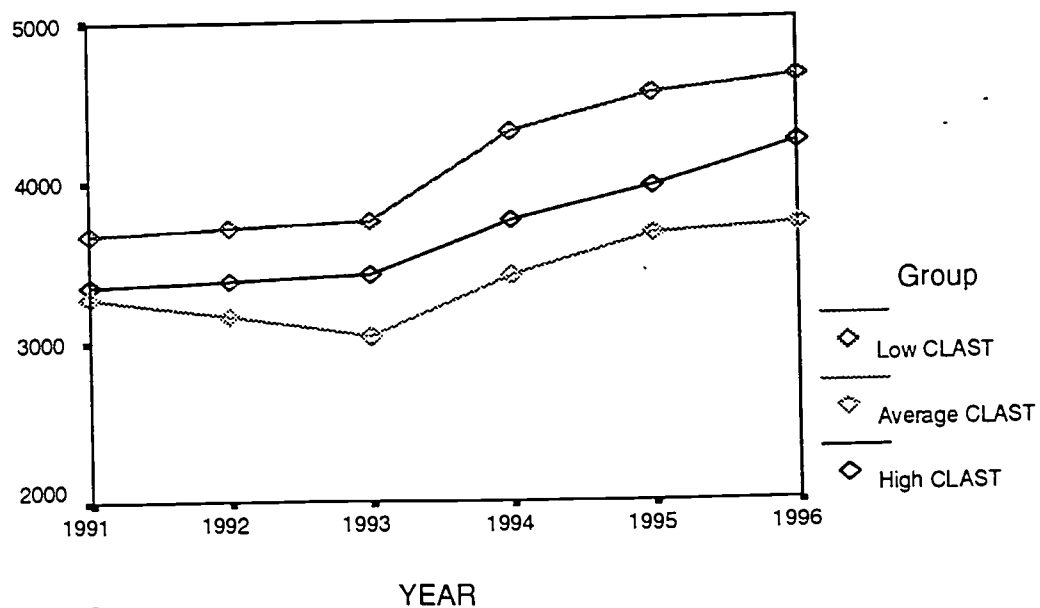
### CLAST Total Performance

By College Group



### CLAST Total Performance

By College Group



# Figure 32

## Associate of Arts Retention Measure

### ANOVA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.424 <sup>a</sup>	.179	.104	14.0450	.179	2.375	7	76	.030

a. Predictors: (Constant), AVGSAL, APPCT, APFC, TOTNIN, AP, TOTINS, TOTAL

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3279.339	7	468.477	2.375	.030 <sup>a</sup>
	Residual	14991.857	76	197.261		
	Total	18271.196	83			

a. Predictors: (Constant), AVGSAL, APPCT, APFC, TOTNIN, AP, TOTINS, TOTAL

b. Dependent Variable: RRAA

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error				Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-3.831	66.370		-.058	.954					
	AP	-.514E-04	.001	-.126	-.409	.684	.364	-.047	-.042	.113	8.857
	APPCT	14.911	13.905	.139	1.072	.287	.095	.122	.111	.645	1.550
	TOTAL	1.085E-03	.001	.469	1.485	.142	.392	.168	.154	.108	9.237
	APFC	-.530E-04	.004	-.016	-.144	.886	-.097	-.016	-.015	.850	1.176
	TOTINS	51.962	78.212	.123	.664	.508	.241	.076	.069	.314	3.187
	TOTNIN	30.598	49.181	.098	.622	.536	-.099	.071	.065	.435	2.300
	AVGSAL	1.135E-04	.001	.026	.191	.849	.257	.022	.020	.582	1.718

a. Dependent Variable: RRAA

# Figure 33

## Associate of Arts Success Measure

### ANOVA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.426 <sup>a</sup>	.182	.106	13.9509	.182	2.410	7	76	.028

a. Predictors: (Constant), AVGSAL, APPCT, APFC, TOTNIN, AP, TOTINS, TOTAL

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3282.990	7	468.999	2.410	.028 <sup>a</sup>
	Residual	14791.656	76	194.627		
	Total	18074.646	83			

a. Predictors: (Constant), AVGSAL, APPCT, APFC, TOTNIN, AP, TOTINS, TOTAL

b. Dependent Variable: SRAA

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error				Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	50.502	65.925		.766	.446					
	AP	-8.52E-04	.001	-.211	-.682	.497	.102	-.078	-.071	.113	8.857
	APPCT	-1.521	13.812	-.014	-.110	.913	-.026	-.013	-.011	.645	1.550
	TOTAL	7.304E-04	.001	.317	1.006	.318	-.180	.115	.104	.108	9.237
	APFC	-6.76E-03	.004	-.207	-1.843	.069	-.262	-.207	-.191	.850	1.176
	TOTINS	124.141	77.688	.296	1.598	.114	.335	.180	.166	.314	3.187
	TOTNIN	-11.250	48.852	-.036	-.230	.818	-.246	-.026	-.024	.435	2.300
	AVGSAL	-8.50E-04	.001	-.196	-1.440	.154	.085	-.163	-.149	.582	1.718

a. Dependent Variable: SRAA

# **Figure 34** **Associate of Arts Success Measure** **As a Percent of the Five Year Goal** **ANOVA**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.419 <sup>a</sup>	.176	.097	.14262	.176	2.225	7	73	.042

a. Predictors: (Constant), AVGSAL, APPCT, TOTNIN, APFC, AP, TOTINS, TOTAL

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.317	7	4.527E-02	2.225	.042 <sup>a</sup>
	Residual	1.485	73	2.034E-02		
	Total	1.802	80			

a. Predictors: (Constant), AVGSAL, APPCT, TOTNIN, APFC, AP, TOTINS, TOTAL

b. Dependent Variable: GSRAA

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta				Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.161	.680			.237	.813					
	AP	-6.83E-06	.000	-.167		-.529	.598	.191	-.062	-.056	.113	8.841
	APPCT	-.118	.141	-.109		-.832	.408	-.132	-.097	-.088	.653	1.532
	TOTAL	8.437E-06	.000	.365		1.130	.262	.287	.131	.120	.108	9.256
	APFC	-1.76E-05	.000	-.054		-.468	.641	-.142	-.055	-.050	.850	1.176
	TOTINS	1.505	.811	.351		1.854	.068	.325	.212	.197	.314	3.181
	TOTNIN	.229	.500	.073		.457	.649	-.182	.053	.049	.442	2.265
	AVGSAL	-5.62E-06	.000	-.130		-.920	.361	.155	-.107	-.098	.569	1.757

a. Dependent Variable: GSRAA

# Figure 35

## Associate in Science Retention Measure

### ANOVA

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Square Change	F Change	df1	df2	
1	.463 <sup>a</sup>	.215	.139	11.8711	.215	2.852	7	73	.011

a. Predictors: (Constant), AVGSAL, PSVPCT, PSVFC, TOTNIN, PSV, TOTINS, TOTAL

#### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2813.135	7	401.876	2.852	.011 <sup>a</sup>
	Residual	10287.308	73	140.922		
	Total	13100.443	80			

a. Predictors: (Constant), AVGSAL, PSVPCT, PSVFC, TOTNIN, PSV, TOTINS, TOTAL

b. Dependent Variable: RRAS

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error				Zero-order	Partial	Part
1	(Constant)	-116.665	52.314		-2.230	.029			
	PSV	-1.35E-03	.002	-.139	-.587	.559	.253	-.069	-.061
	TOTAL	6.261E-04	.000	.314	1.255	.213	.304	.145	.130
	PSVPCT	16.955	23.546	.078	.720	.474	.053	.084	.075
	PSVFC	2.465E-03	.002	.148	1.390	.169	.066	.161	.144
	TOTINS	166.152	66.402	.440	2.502	.015	.248	.281	.260
	TOTNIN	111.542	41.220	.407	2.706	.008	.041	.302	.281
	AVGSAL	2.094E-04	.001	.057	.401	.690	.264	.047	.042

a. Dependent Variable: RRAS



**Figure 36**  
**Associate in Science Measure**  
**As a Percent of the Five Year Goal**  
**ANOVA**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Square Change	F Change	df1	df2	
1	.441 <sup>a</sup>	.194	.114	.22048	.194	2.414	7	70	.028

a. Predictors: (Constant), AVGSAL, PSVPCT, PSVFC, TOTNIN, PSV, TOTINS, TOTAL

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.821	7	.117	2.414	.028 <sup>a</sup>
	Residual	3.403	70	4.861E-02		
	Total	4.224	77			

a. Predictors: (Constant), AVGSAL, PSVPCT, PSVFC, TOTNIN, PSV, TOTINS, TOTAL

b. Dependent Variable: GRRAS

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error				Zero-order	Partial	Part
1	(Constant)	-.226	.980		-.231	.818			
	PSV	5.014E-05	.000	.282	1.136	.260	.108	.135	.122
	TOTAL	-1.12E-05	.000	-.313	-1.191	.238	.076	-.141	-.128
	PSVPCT	.496	.442	.124	1.124	.265	.077	.133	.121
	PSVFC	-6.19E-05	.000	-.207	-1.880	.064	-.264	-.219	-.202
	TOTINS	.281	1.250	.040	.224	.823	.023	.027	.024
	TOTNIN	1.355	.766	.273	1.769	.081	.178	.207	.190
	AVGSAL	2.044E-05	.000	.307	2.096	.040	.240	.243	.225

a. Dependent Variable: GRRAS

**Figure 37**

**Licensure Pass Rate Measure  
As a Percent of the Five Year Goal  
ANOVA**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.432 <sup>a</sup>	.187	.105	6.51E-02	.187	2.296	7	70	.036

a. Predictors: (Constant), AVGSAL, PSVPCT, PSVFC, PSV, TOTNIN, TOTINS, TOTAL

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.819E-02	7	9.741E-03	2.296	.036 <sup>a</sup>
	Residual	.297	70	4.242E-03		
	Total	.365	77			

a. Predictors: (Constant), AVGSAL, PSVPCT, PSVFC, PSV, TOTNIN, TOTINS, TOTAL

b. Dependent Variable: GSLRP

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	1.403	.423		3.315	.001			
	PSV	-6.73E-06	.000	-.132	-.532	.596	.168	-.063	-.057
	TOTAL	2.495E-06	.000	.237	.903	.370	.213	.107	.097
	PSVPCT	7.842E-02	.130	.074	.603	.548	.180	.072	.065
	PSVFC	-3.05E-05	.000	-.335	-2.714	.008	-.333	-.309	-.293
	TOTINS	-.211	.450	-.112	-.470	.640	.245	-.056	-.051
	TOTNIN	-.460	.362	-.283	-1.273	.207	-.226	-.150	-.137
	AVGSAL	-3.96E-07	.000	-.020	-.134	.894	.158	-.016	-.014

a. Dependent Variable: GSLRP

**Figure 38**

**Postsecondary Vocational Certificate Success Measure  
As a Percent of the Five Year Goal  
ANOVA**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R Square Change	F Change	df1	df2	
1	.518 <sup>a</sup>	.269	.156	.24143	.269	2.389	6	39	.046

a. Predictors: (Constant), AVGSAL, PSAVFC, PSAVPCT, TOTAL, TOTNIN, PSAV

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.836	6	.139	2.389	.046 <sup>a</sup>
	Residual	2.273	39	5.829E-02		
	Total	3.109	45			

a. Predictors: (Constant), AVGSAL, PSAVFC, PSAVPCT, TOTAL, TOTNIN, PSAV

b. Dependent Variable: GSRP

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error				Zero-order	Partial	Part
1	(Constant)	-.246	.921		-.268	.790			
	PSAV	-1.13E-04	.000	-.211	-.816	.419	.248	-.130	-.112
	TOTAL	2.452E-05	.000	.409	1.637	.110	.073	.254	.224
	PSAVPCT	2.157	.931	.706	2.318	.026	.352	.348	.317
	PSAVFC	3.057E-05	.000	.108	.708	.483	.013	.113	.097
	TOTNIN	.286	1.572	.040	.182	.857	.146	.029	.025
	AVGSAL	1.982E-05	.000	.217	1.129	.266	.163	.178	.155

a. Dependent Variable: GSRP

## Florida Community College Accountability Program Analysis Variables and Analysis

### Dependent Variables For 94, 95, 96

**rraa** = Associate in Arts Retention Measure  
**sraa** = Associate in Arts Success Measure  
**rras** = Associate in Science Retention Measure  
**sras** = Associate in Science Success Measure  
**rrp** = Postsecondary Vocational Certificate Retention Measure  
**srp** = Postsecondary Vocational Certificate Success Measure  
**gpa** = Associate in Arts Transfer Student Performance  
**slrp** = Licensure Pass Rate Measure  
**vpp** = Placement Rate Measure  
**cpsrr** = College Preparatory Reading Performance Measure  
**cpsrw** = College Preparatory Writing Performance Measure  
**cpsrm** = College Preparatory Math Performance Measure  
**cpaa** = College Preparatory Retention Measure  
**cpaa** = College Preparatory Success Measure  
**clastc** = Associate in Arts CLAST Measure, College Preparatory Students  
**clastn** = Associate in Arts CLAST Measure, Non-College Preparatory Students  
**clastp** = Associate in Arts CLAST Measure, All Students  
**grraa** = rraa as a percent of a five year goal  
**gsraa** = sraa as a percent of a five year goal  
**grras** = rras as a percent of a five year goal  
**gsras** = sras as a percent of a five year goal  
**grrp** = rrp as a percent of a five year goal  
**gsrp** = srp as a percent of a five year goal  
**ggpa** = gpa as a percent of a five year goal  
**gslrp** = slrp as a percent of a five year goal  
**gvpp** = vpp as a percent of a five year goal  
**gcpsrr** = cpsrr as a percent of a five year goal  
**gcpsrw** = cpsrw as a percent of a five year goal  
**gcpsrm** = cpsrm as a percent of a five year goal  
**gcpaa** = cpaa as a percent of a five year goal  
**gcpsaa** = cpsaa as a percent of a five year goal  
**gclastc** = clastc as a percent of a five year goal  
**gclastn** = clastn as a percent of a five year goal  
**gclastp** = clastp as a percent of a five year goal

### Independent Variables For 91, 92, 93, 94, 95, 96

**ap** = Total advanced and professional FTE enrollment  
**psv** = Total postsecondary vocational FTE enrollment  
**psav** = Total adult postsecondary vocational FTE enrollment  
**prep** = Total college preparatory FTE enrollment  
**total** = Total institutional FTE enrollment  
**appct** = Total advanced and professional FTE enrollment as a percent of Total FTE enrollment  
**psvpct** = Total postsecondary vocational FTE enrollment as a percent of Total FTE enrollment  
**psavpct** = Total adult postsecondary vocational FTE enrollment as a percent of Total FTE enrollment  
**prepct** = Total college preparatory FTE enrollment as a percent of Total FTE enrollment  
**apfc** = Advanced and professional instructional full cost per FTE

**psvfc** = Postsecondary vocational instructional full cost per FTE  
**psavfc** = Adult postsecondary vocational institutional full cost per FTE  
**prepfc** = Total college preparatory institutional full cost per FTE  
**totins** = Total instructional expenditures as a percent total expenditures by institution  
**totnin** = Total non-instructional expenditures as a percent total expenditures by institution  
**avgsal** = Average salary of full time instructional personnel calculated as a 2.0 semester equivalent by institution

From the dependent variable set run as independent variables For 94, 95, 96?

rraa  
 sraa  
 cpsrr  
 cpsrw  
 cpsrm

**Program mix** = appct, psvpct, psavpct, prepct

**Program full costs** = apfc, psvfc, psavfc, prepfc

**Institutional expense** = totins, totnin, avgsal

**Academic measures related to academic outcomes** = rraa, sraa, cpsrr, cpsrw, cpsrm

Dependent Variables for 94  
 Independent Variables = 91, 92, 93, 94

Dependent Variables for 95  
 Independent Variables = 92, 93, 94, 95

Dependent Variables for 96  
 Independent Variables = 93, 94, 95, 96

FTE or size of institution or program =  
 ap, psv, psav, prep, total

### Overall Research Questions?

1. Are we making progress toward the goals on the 17 accountability measures at the institutional level from a system perspective?
2. At the institutional level, are scores increasing on the 17 accountability measures?
3. What are the institutional attributes that account for the difference among institutions in progress toward goal?
4. What are the institutional attributes that account for the difference among institutions on score measures for the 17 accountability measures?

### Analysis #1

Box plots on the 17 accountability measures for all institutions across 94, 95, 96.

## Analysis #2

Box plots on progress toward goal for the 17 accountability measures for all institutions across 94, 95, 96.

## Analysis #3

Dependent variable = rraa, sraa, grraa, gsraa

Independent variables = ap, appct, apfc, avgsal, total, totins, totnin

## Analysis #4

Dependent variable = rras, sras, slrp, grras, gsras, gslrp

Independent variables = psv, psvpct, psvfc, avgsal, total, totins, totnin

## Analysis #5

Dependent variable = rrp, sras, srp, grrp, gsrp,

Independent variables = psav, psavpct, psavfc, avgsal, total, totins, totnin

## Analysis #6

Dependent variable = vpp, gvpp,

Independent variables = psv, psav, psvpct, psavpct, psvfc, psavfc, avgsal, total, totins, totnin

## Analysis #7

Dependent variable = gpa

Independent variables = ap, appct, apfc, avgsal, total, totins, totnin, rraa, sraa,

## Analysis #8

Dependent variable = clastn, clastp, gclastn, gclastp

Independent variables = ap, appct, apfc, avgsal, total, totins, totnin, rraa, sraa,

## Analysis #9

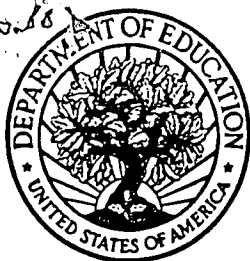
Dependent variable = cpsrr, cpsrw, cpsrm, gcpsrr, gcpsrw, gcpsrm

Independent variables = prep, prepct, prepfc, avgsal, total, totins, totnin

## Analysis #10

Dependent variable = cpraa, cpsaa, clastc, gcpraa, gcpsaa, gclastc

Independent variables = ap, prep, appct, prepct, apfc, prepfc, avgsal, total, totins, totnin, cpsrr, cpsrw, cpsrm



U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



TC 970597

# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: The Florida Community College Accountability Plan: An Analysis of Institutional Characteristics and Success at Meeting State Defined Performance Measures	
Author(s): Patricia W. Windham, Ph.D., E. Raymond Hackett, Ph.D.	
Corporate Source: State Board of Community Colleges Division of Community Colleges 325 W. Gaines Street, 1314 TUL Tallahassee, Florida 32399-0400	Publication Date: October 1997

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.



Check here  
**For Level 1 Release:**  
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY  _____ Sample _____  TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
---

Level 1

The sample sticker shown below will be affixed to all Level 2 documents



Check here  
**For Level 2 Release:**  
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY  _____ Sample _____  TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
--

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign  
here→  
please

Signature: Patricia W. Windham, PhD	Printed Name/Position/Title: Patricia W. Windham, Ph.D. Director of Educational Effectiveness & Research
Organization/Address: State Board of Community Colleges Division of Community Colleges 325 W. Gaines St, 1314 TUL Tallahassee, Florida 32399-0400	Telephone: (850)488-0555 X172 FAX: (850)488-9763 E-Mail Address: Pat@dcc.firn.edu Date: 12/2/97

### III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

### IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

### V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:	Jonathan Kelly ERIC Clearinghouse for Community Colleges 3051 Moore Hall Box 951521 Los Angeles, CA 90095-1521
---	---

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to: